=> d l6 ibib abs hitstr 1-33

L6 ANSWER 1 OF 33 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2002:142561 HCAPLUS
DOCUMENT NUMBER: 136:205475
TITLE: Peptide and peptide mimetic **conjugates** with integrin-inhibitor properties and usage for the integration of prosthetic materials
INVENTOR(S): Meyer, Joerg; Nies, Berthold; Dard, Michel; Hoelzemann, Guenter; Kessler, Horst; Kantlehner, Martin; Hersel, Ulrich; Gibson, Christoph; Sulyok, Gabor
PATENT ASSIGNEE(S): Merck Patent G.m.b.H., Germany
SOURCE: PCT Int. Appl., 38 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002013872	A1	20020221	WO 2001-EP8932	20010802
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
DE 10040105	A1	20020228	DE 2000-10040105	20000817

PRIORITY APPLN. INFO.: DE 2000-10040105 A 20000817

AB The invention relates to compds. of formula B-Q-X1, where B is a bioactive, cell adhesive mediating mol., Q is absent or is an inorg. **spacer** mol. and X1 is an anchor mol., selected from the group Lys-(CO-CH2-(CH2)n-PO3H2)2 , -Lys-[Lys-(CO-CH2-(CH2)n-PO3H2)2]2 , or -Lys-(Lys[-Lys-(CO-CH2-(CH2)n-PO3H2)2]2)2 , and n independently represents 0, 1, 2 or 3, where a free amino group of group B is linked in peptide form to a free carboxyl group of the **spacer** mol. Q or of the anchor mol. X1, or a free amino group of the radical Q is linked in peptide form to a free carboxyl group of the radical X1. The invention also relates to the salts of the mols. The compds. can be used as integrin inhibitors for the treatment of illnesses, deficiencies, inflammations caused by implants and osteolytic illnesses such as osteoporosis, thrombosis, cardiac infarction and arteriosclerosis, in addn. to the acceleration and strengthening of the integration process of implants or the biocompatible surface in tissue.

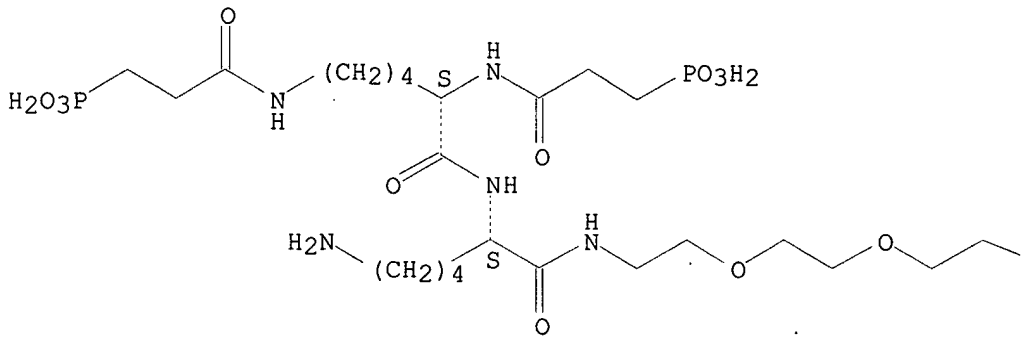
IT **400607-87-6P**
RL: DEV (Device component use); PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(peptide and peptide mimetic **conjugates** with integrin-inhibitor properties and usage for integration of prosthetic materials)

RN 400607-87-6 HCAPLUS
CN Cyclo[L-arginylglycyl-L-.alpha.-aspartyl-D-phenylalanyl-N6-[N2,N6-bis(1-oxo-3-phosphonopropyl)-L-lysyl-L-lysyl-20-amino-3,6,9,12,15,18-hexaoxaeicosanoyl-20-amino-3,6,9,12,15,18-hexaoxaeicosanoyl]-L-lysyl]

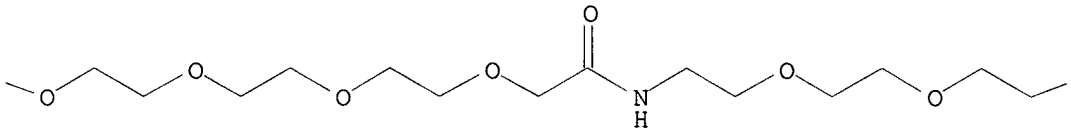
(9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



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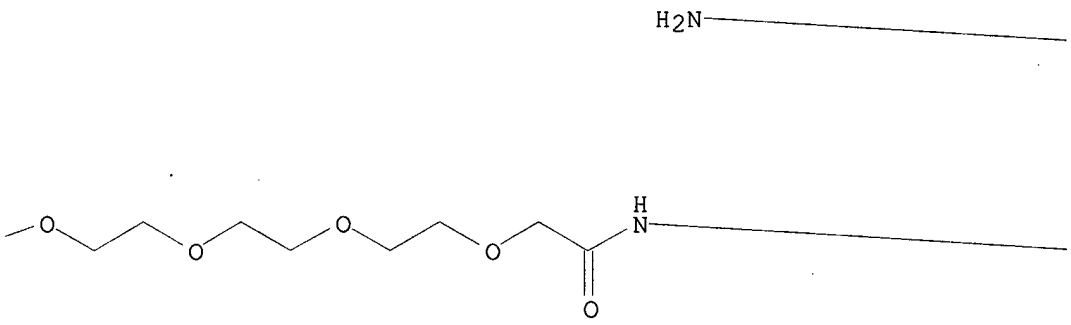

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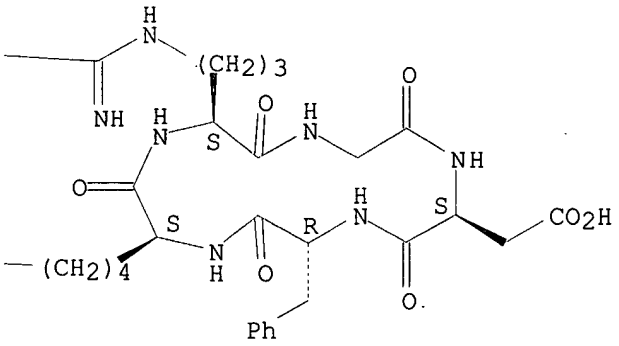


REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 2 OF 33 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2002:107826 HCAPLUS
DOCUMENT NUMBER: 136:172758
TITLE: Terminally-branched polymeric linkers containing extension moieties for prodrug **conjugates**
INVENTOR(S): Greenwald, Richard B.; Choe, Yun H.
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 32 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002015691	A1	20020207	US 2001-823296	20010329

PRIORITY APPLN. INFO.: US 2000-193931P P 20000331

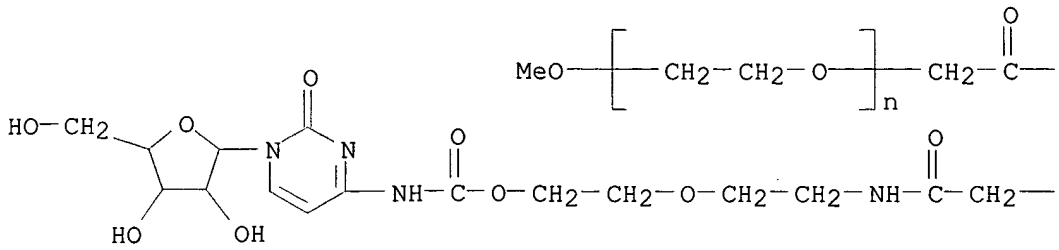
AB The present invention relates to polymer-based (e.g., PEG) **conjugates** having increased therapeutic payloads. In particular, the invention relates to the use of extension moieties which increase the efficiency of the loading of drugs onto the polymeric carriers. A variety of prodrugs were prepd. from ara-C and PEG derivs. by using **spacer** groups. The prodrug demonstrated better antitumor activity than ara-C alone. The prodrug produced complete tumor regression.

IT **396133-96-3P 396133-97-4P 396133-98-5P**
396133-99-6P 396134-00-2P 396134-01-3P
396134-02-4P 396134-06-8P 396134-07-9P
396134-08-0P 396134-09-1P 396134-10-4P
396134-11-5P 396134-12-6P 396134-15-9P
396134-16-0P 396134-17-1P 396134-18-2P
396134-19-3P 396134-20-6P 396134-21-7P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(terminally-branched polymeric linkers contg. extension moieties for prodrug **conjugates**)

RN 396133-96-3 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), .alpha.-[(4S)-14-[(1-.beta.-D-arabinofuranosyl-1,2-dihydro-2-oxo-4-pyrimidinyl)amino]-4-[[[2-[2-[[[(1-.beta.-D-

arabinofuranosyl-1,2-dihydro-2-oxo-4-pyrimidinyl)amino]carbonyl]oxy]ethoxy]ethyl]amino]carbonyl]-2,6,14-trioxo-10,13-dioxa-3,7-diazatetradec-1-yl]-.omega.-methoxy- (9CI) (CA INDEX NAME)

PAGE 1-A



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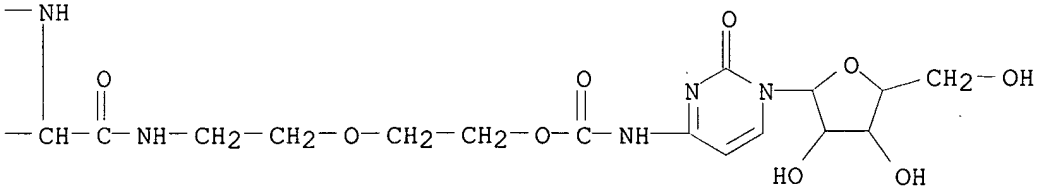

RN 396133-97-4 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), .alpha.-[(4S)-15-[(1-.beta.-D-arabinofuranosyl-1,2-dihydro-2-oxo-4-pyrimidinyl)amino]-4-[[[2-[2-[2-[(1-.beta.-D-arabinofuranosyl-1,2-dihydro-2-oxo-4-pyrimidinyl)amino]-2-oxoethoxy]ethoxy]ethyl]amino]carbonyl]-2,6,15-trioxo-10,13-dioxa-3,7-diazapentadec-1-yl]-.omega.-methoxy- (9CI) (CA INDEX NAME)

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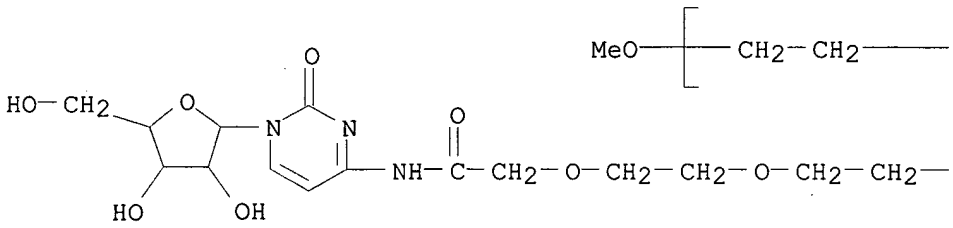

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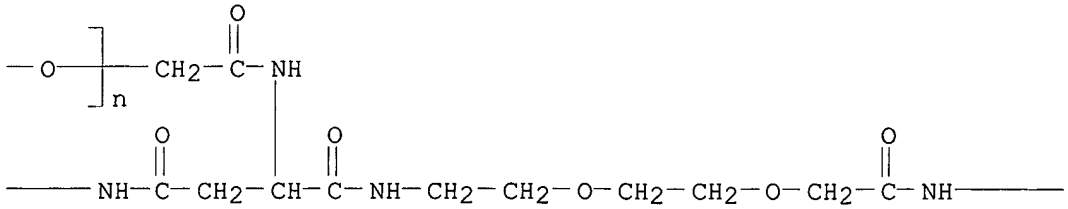

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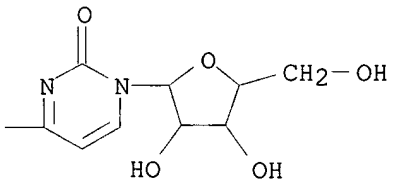

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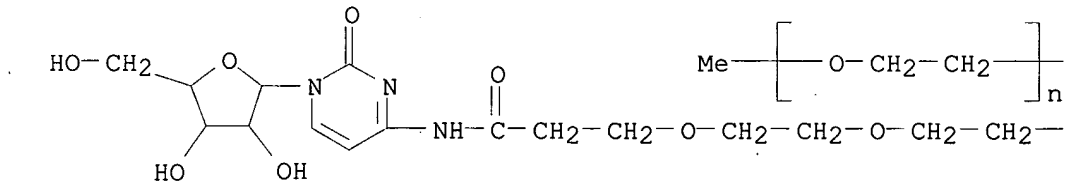

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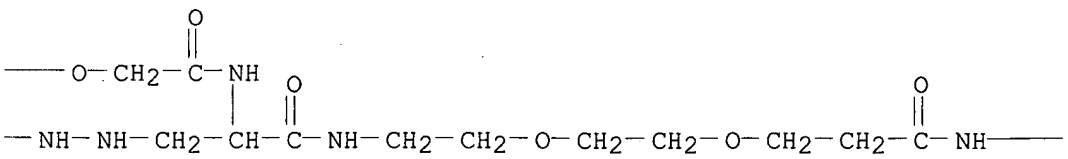

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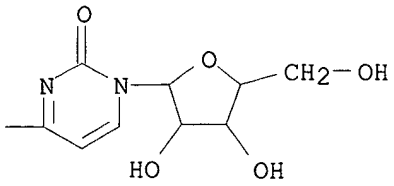

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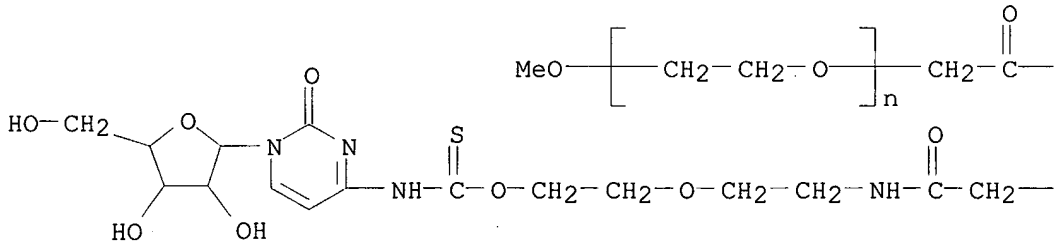

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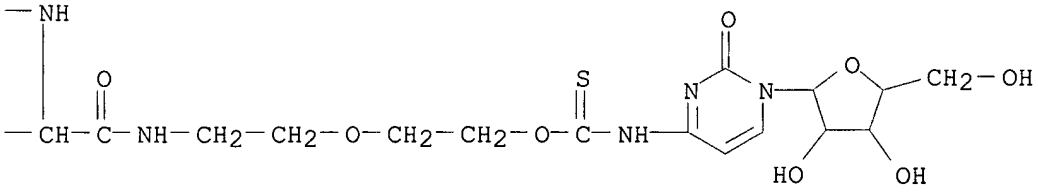
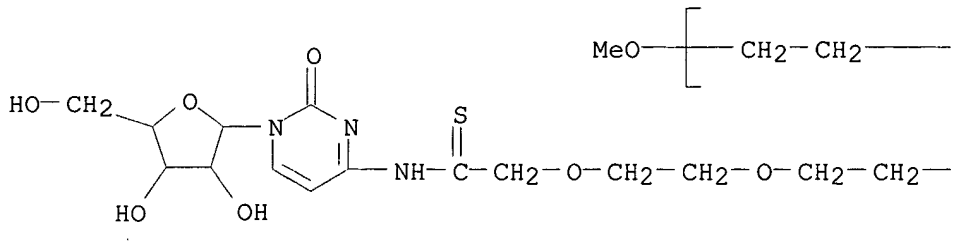


RN 396134-00-2 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), .alpha.-[(4S)-15-[(1-.beta.-D-arabinofuranosyl-1,2-dihydro-2-oxo-4-pyrimidinyl)amino]-4-[[[2-[2-[2-[(1-.beta.-D-arabinofuranosyl-1,2-dihydro-2-oxo-4-pyrimidinyl)amino]-2-thioxoethoxy]ethoxy]ethyl]amino]carbonyl]-2,6-dioxo-15-thioxo-10,13-dioxa-3,7-diazapentadec-1-yl]-.omega.-methoxy- (9CI) (CA INDEX NAME)

PAGE 1-A



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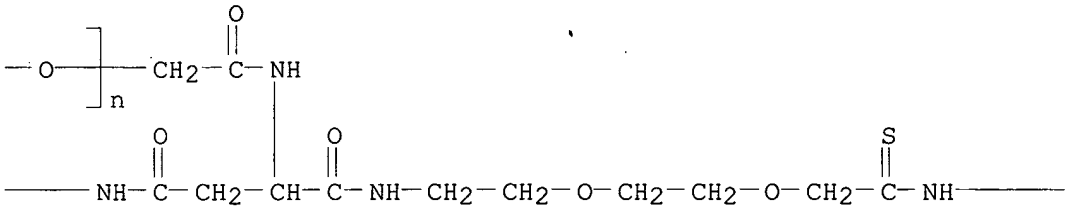

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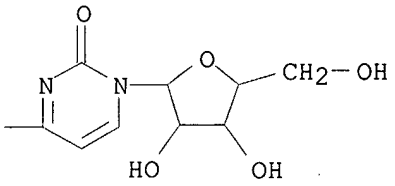

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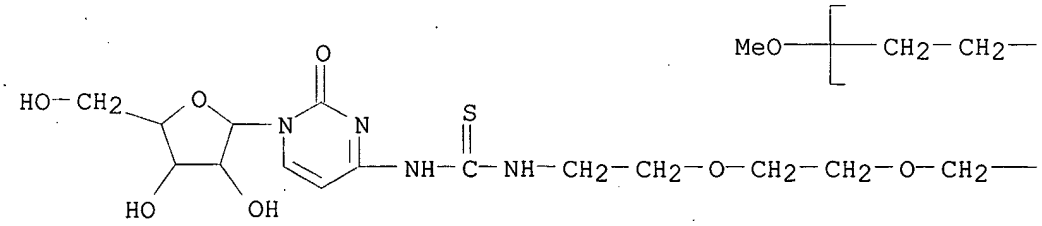
PAGE 1-A



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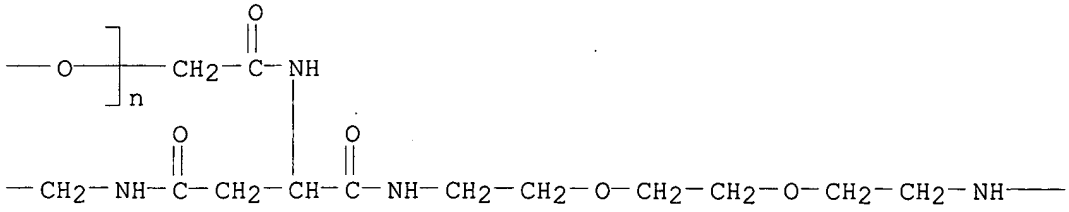

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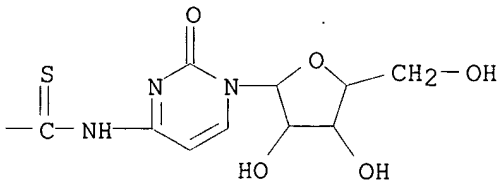

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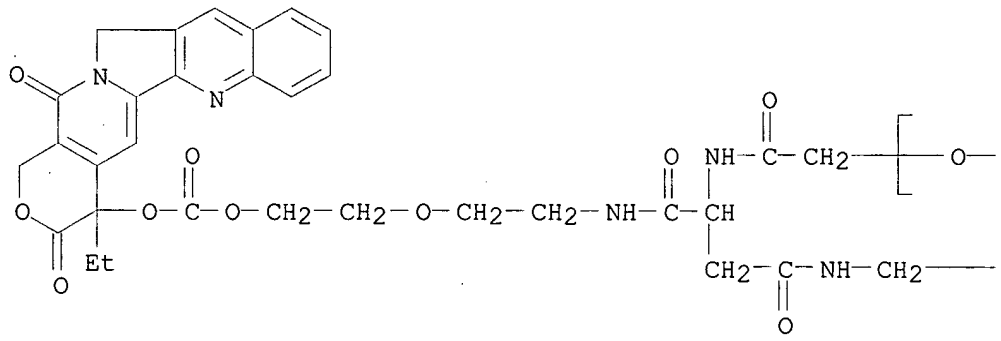

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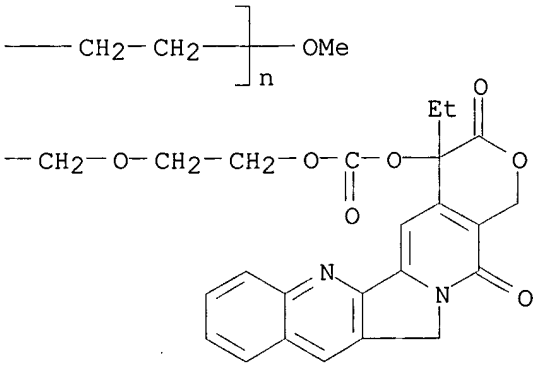

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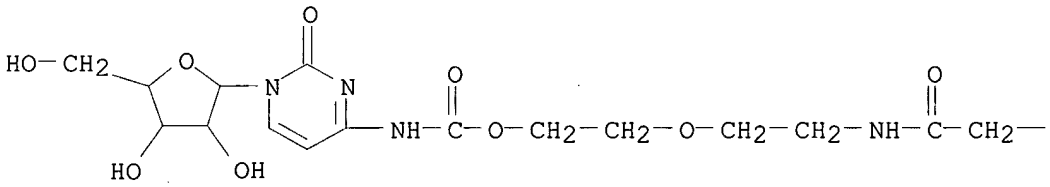

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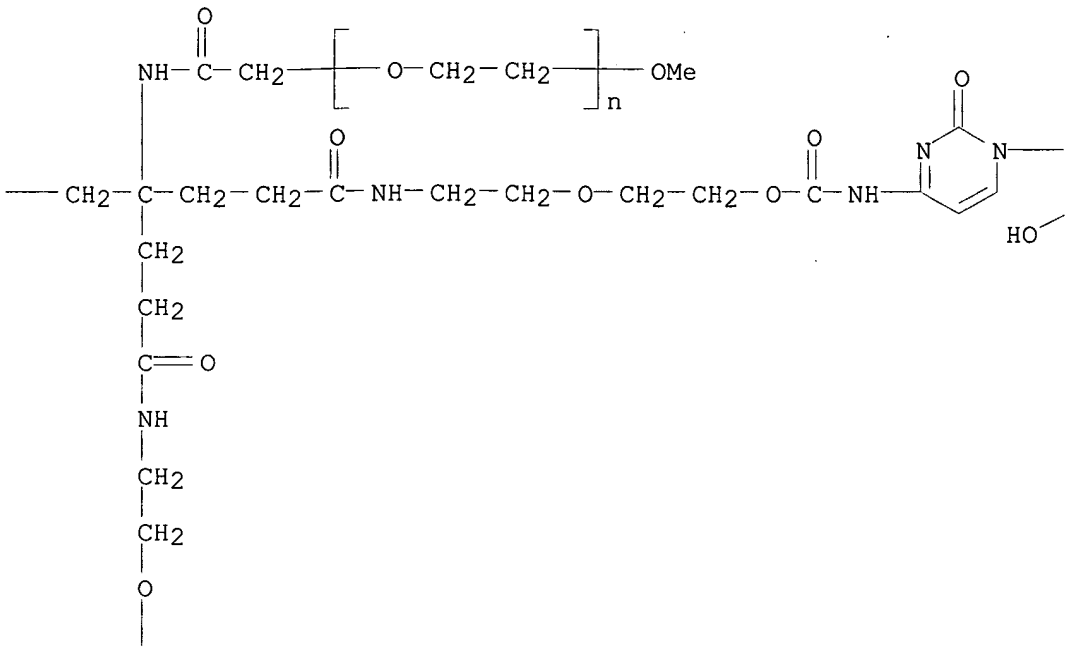

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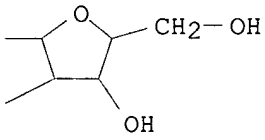

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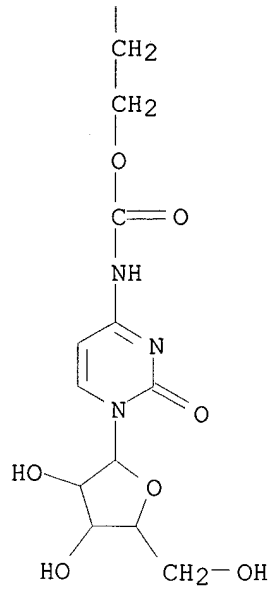

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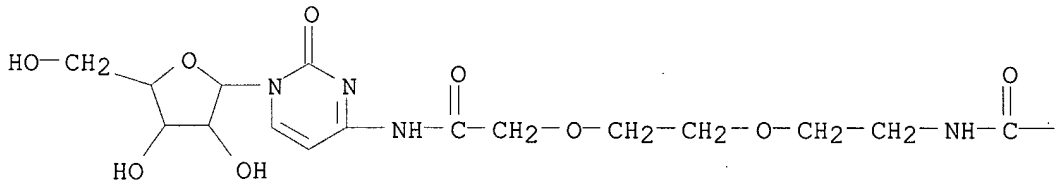
PAGE 1-A



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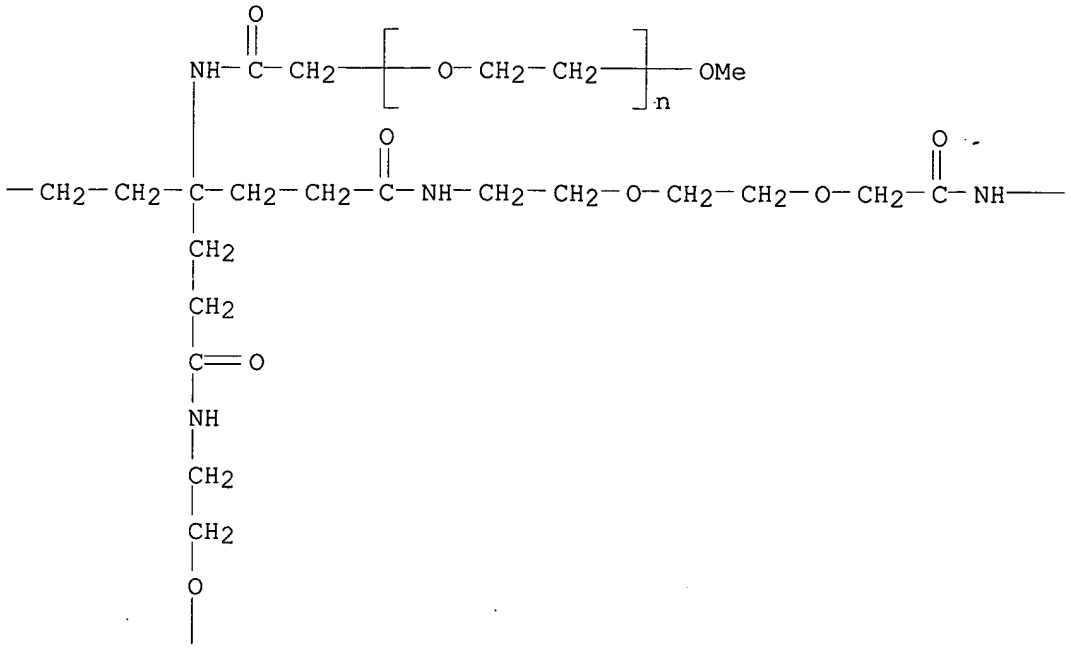

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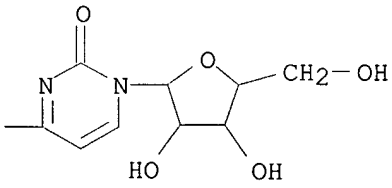

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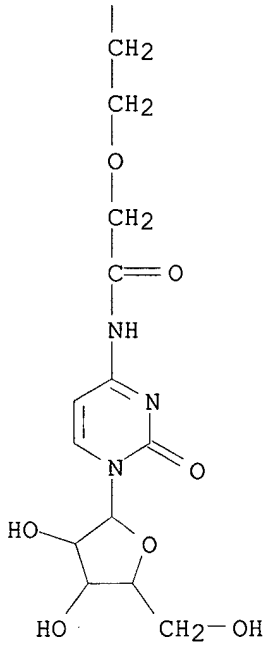

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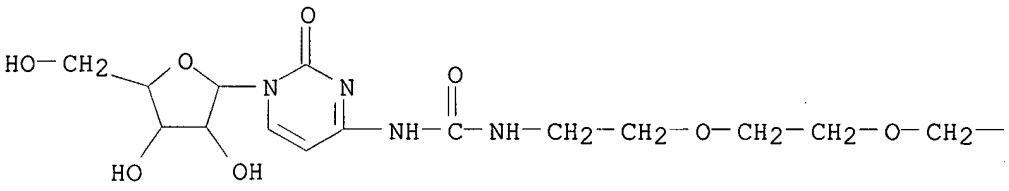

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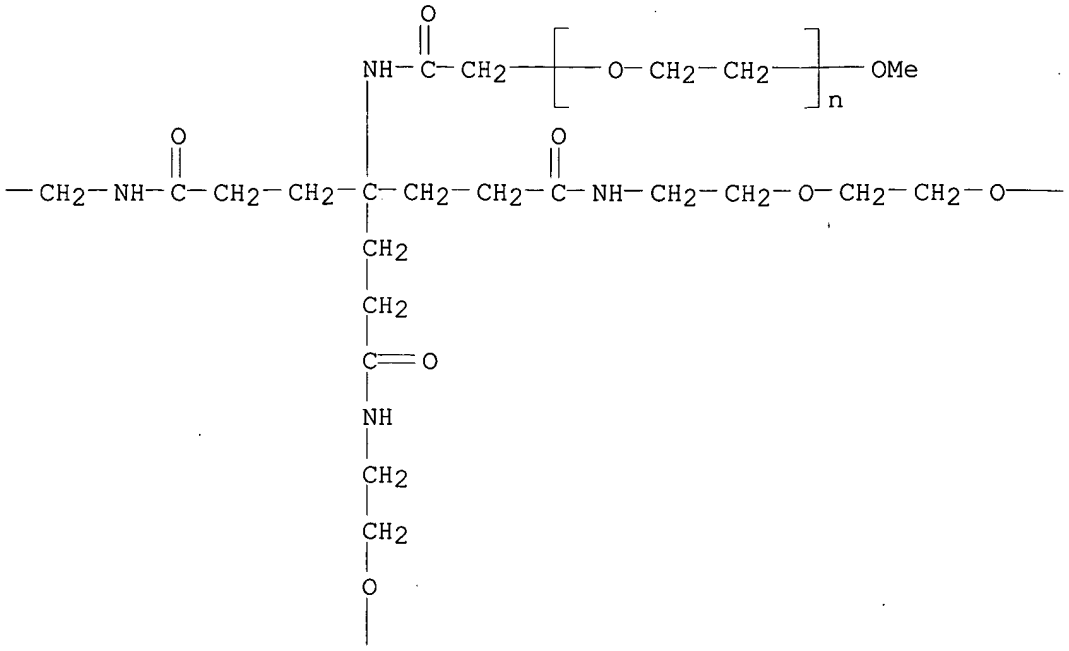
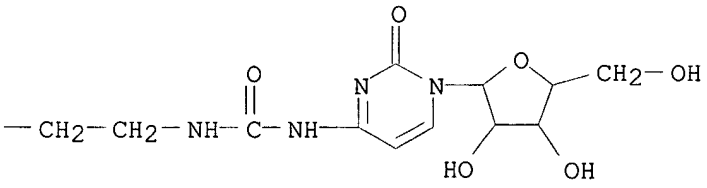
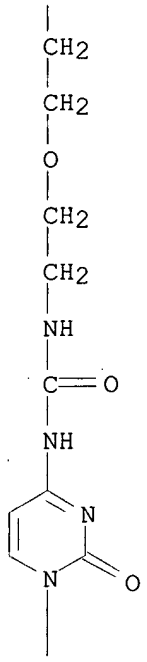


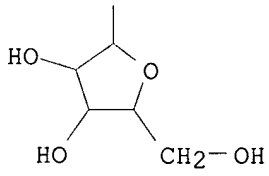
PAGE 1-C



PAGE 2-B

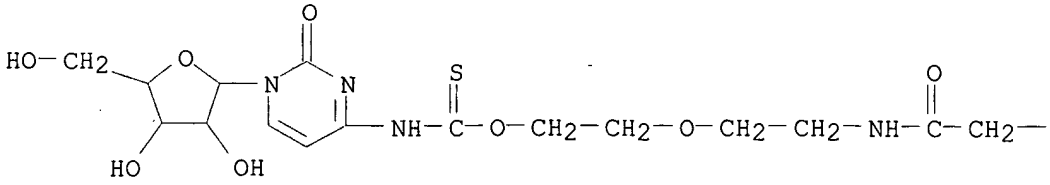


PAGE 3-B



RN 396134-09-1 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), .alpha.-[15-[(1-.beta.-D-arabinofuranosyl-1,2-dihydro-2-oxo-4-pyrimidinyl)amino]-4,4-bis[3-[[2-[2-[[(1-.beta.-D-arabinofuranosyl-1,2-dihydro-2-oxo-4-pyrimidinyl)amino]thioxomethoxy]ethoxy]ethyl]amino]-3-oxopropyl]-2,7-dioxo-15-thioxo-11,14-dioxa-3,8-diazapentadec-1-yl]-.omega.-methoxy- (9CI) (CA INDEX NAME)

PAGE 1-A



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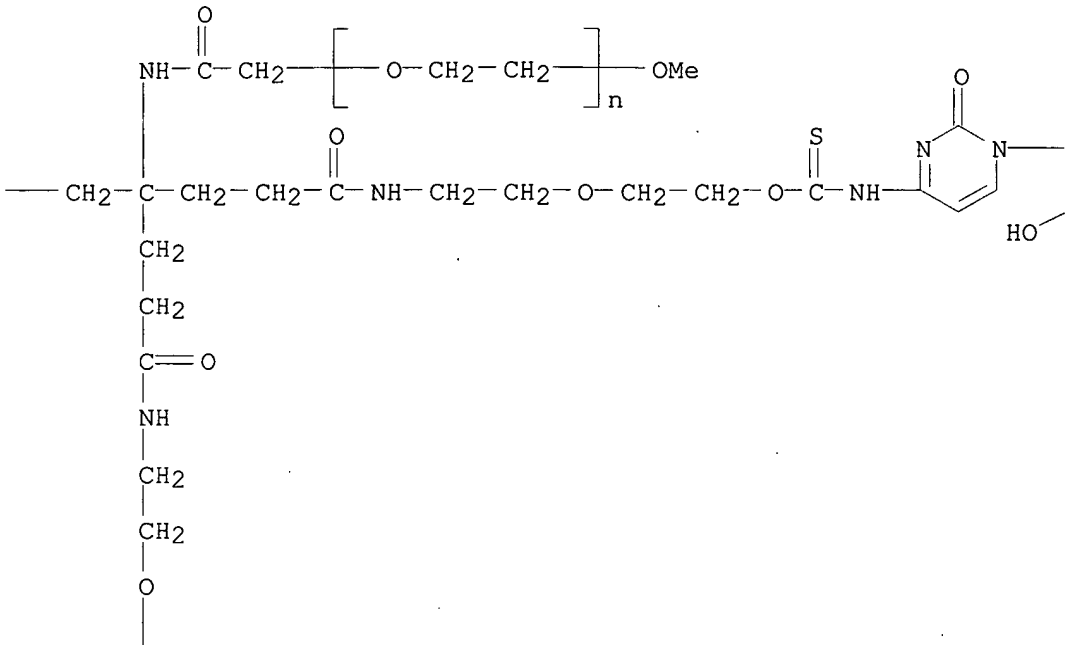
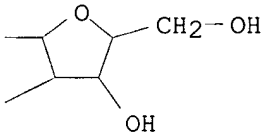
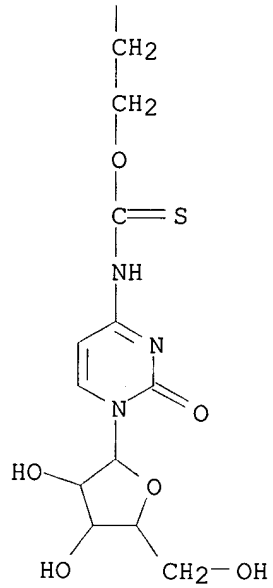


PAGE 1-C



PAGE 2-B



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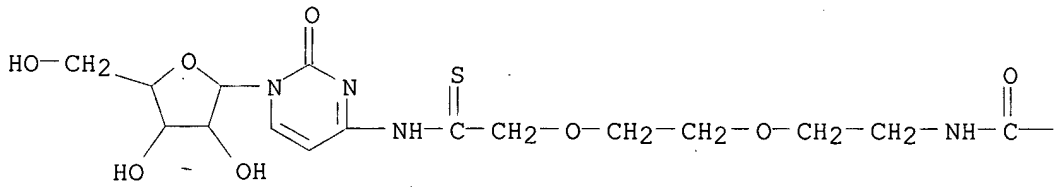
PAGE 1-A



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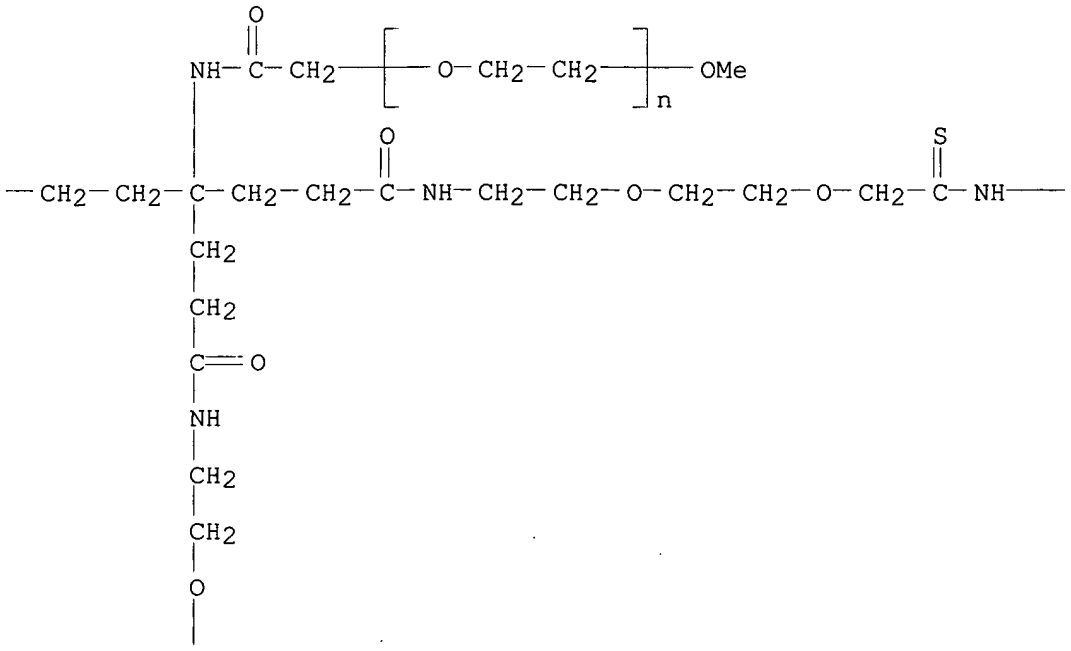
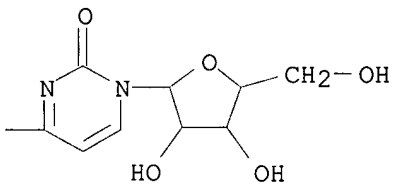
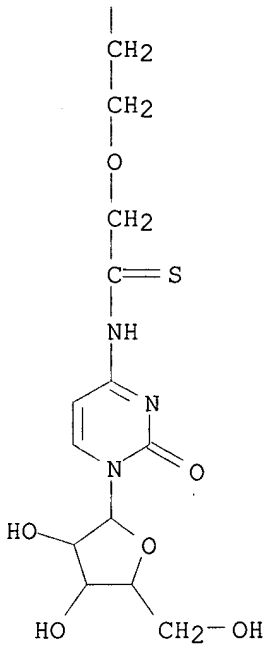


PAGE 1-C

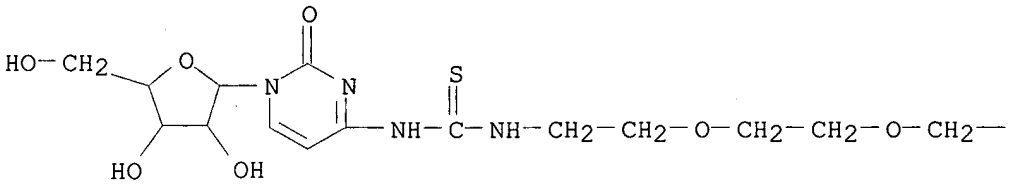


PAGE 2-B

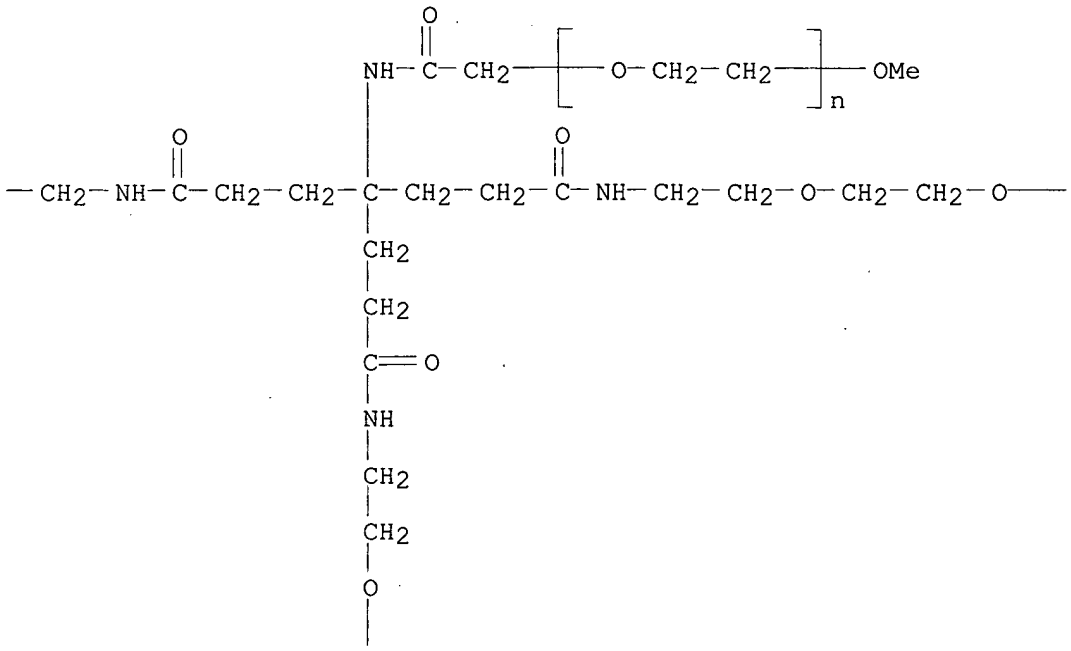


RN 396134-11-5 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), .alpha.-[18-[(1-.beta.-D-arabinofuranosyl-1,2-dihydro-2-oxo-4-pyrimidinyl)amino]-4,4-bis[14-[(1-.beta.-D-arabinofuranosyl-1,2-dihydro-2-oxo-4-pyrimidinyl)amino]-3-oxo-14-thioxo-7,10-dioxa-4,13-diazatetradec-1-yl]-2,7-dioxo-18-thioxo-11,14-dioxa-3,8-diazaoctadec-1-yl]-.omega.-methoxy- (9CI) (CA INDEX NAME)

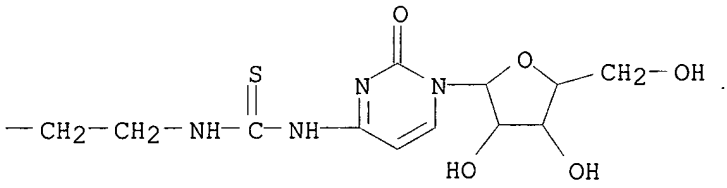
PAGE 1-A



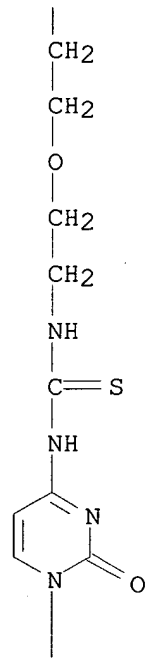
PAGE 1-B



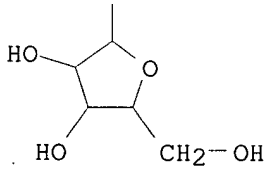
PAGE 1-C



PAGE 2-B



PAGE 3-B



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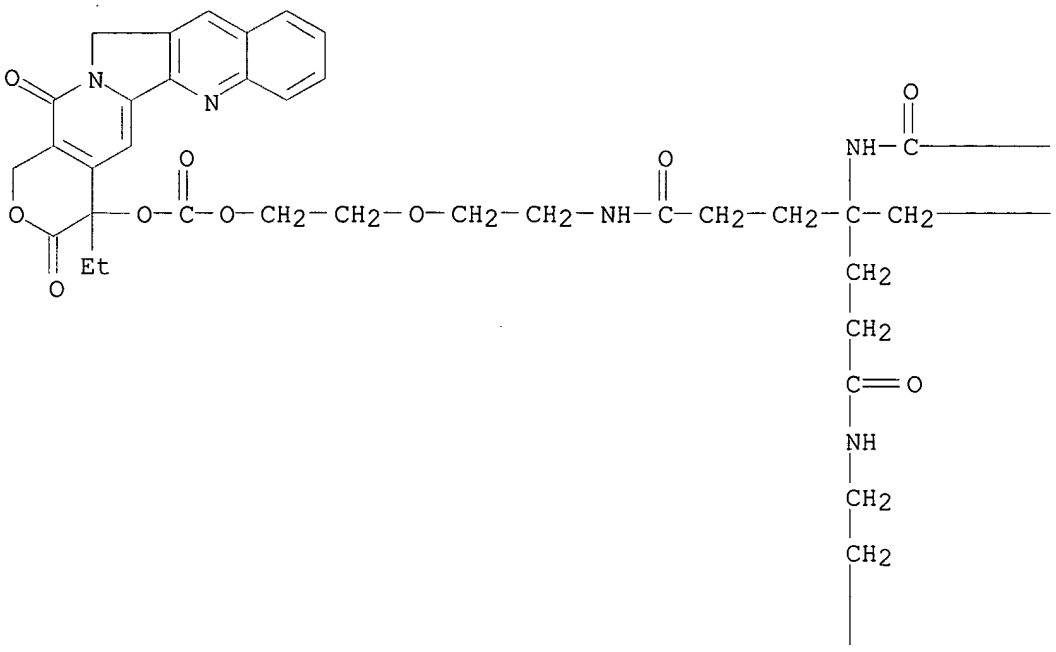
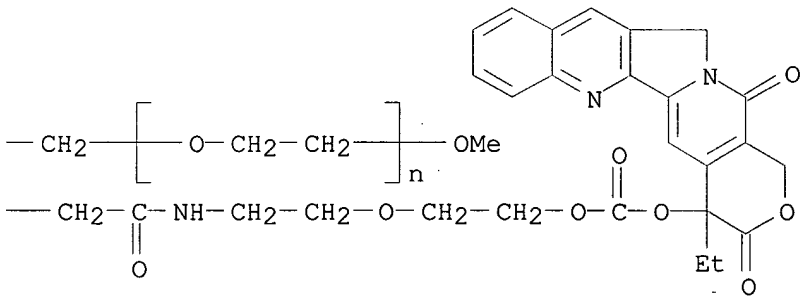
CN Poly(oxy-1,2-ethanediyl), .alpha.-[15-[[(4S)-4-ethyl-3,4,12,14-tetrahydro-3,14-dioxo-1H-pyrano[3',4':6,7]indolizino[1,2-b]quinolin-4-yl]oxy]-4,4'-bis[3-[[2-[2-[[[[(4S)-4-ethyl-3,4,12,14-tetrahydro-3,14-dioxo-1H-pyrano[3',4':6,7]indolizino[1,2-b]quinolin-4-yl]oxy]carbonyl]oxy]ethoxy]ethyl]amino]-3-oxopropyl]-2,7,15-trioxo-11,14-dioxa-3,8-diazapentadec-1-yl]-.omega.-methoxy- (9CI) (CA INDEX NAME)

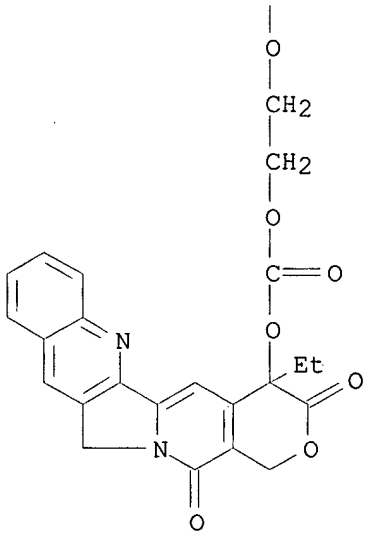
PAGE 1-A



PAGE 1-B



PAGE 2-A



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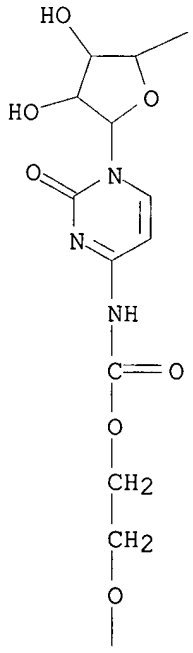
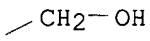
CN Poly(oxy-1,2-ethanediyl), .alpha.-methyl-.omega.-hydroxy-, 1-ether with N-(hydroxyacetyl)-L-aspartoylbis[N1,N4-bis[2-[2-[[[(1-.beta.-D-arabinofuranosyl-1,2-dihydro-2-oxo-4-pyrimidinyl)amino]carbonyl]oxy]ethoxy]ethyl]-L-aspartamide] (9CI) (CA INDEX NAME)

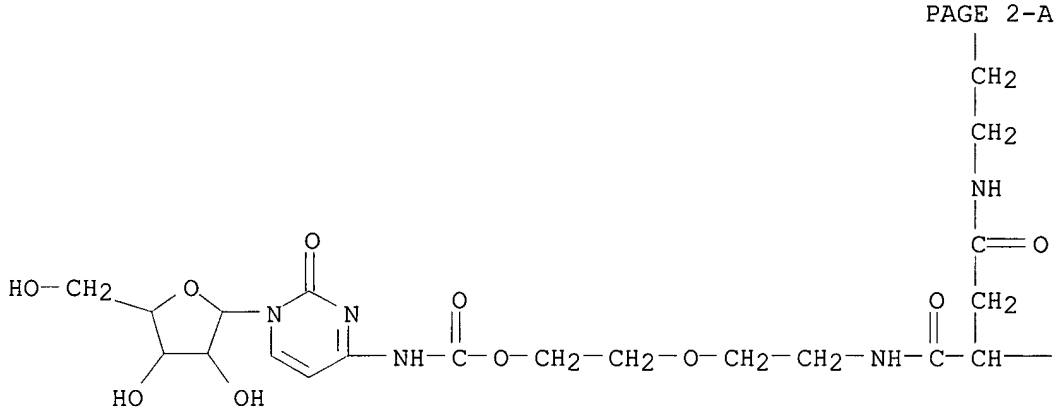
PAGE 1-A



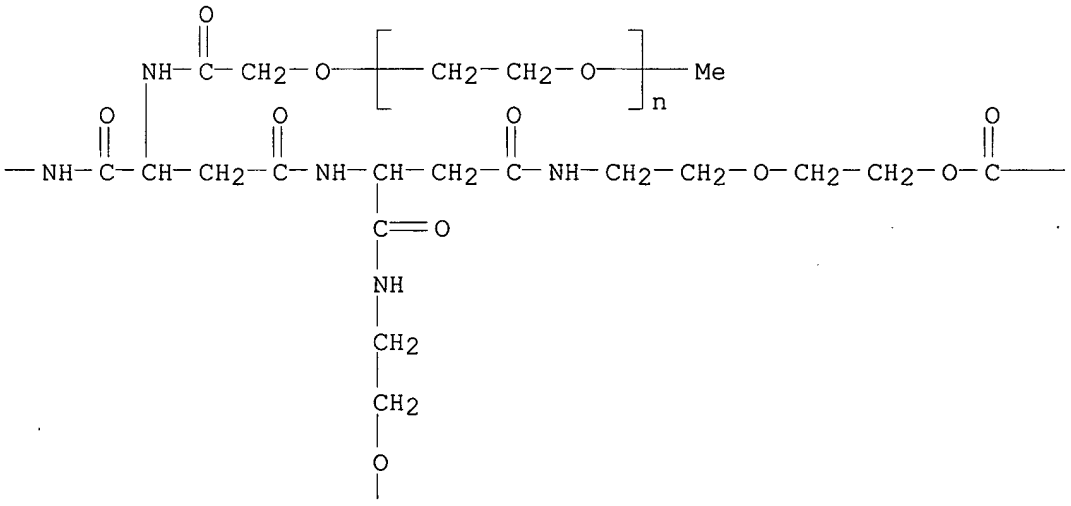
PAGE 1-B



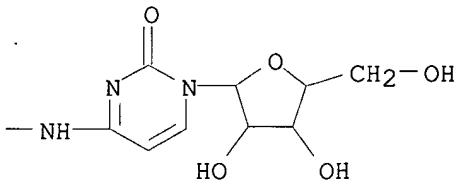
PAGE 2-A



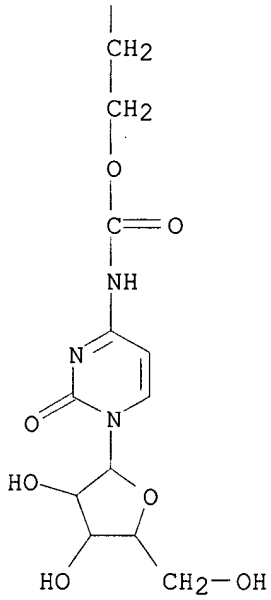
PAGE 2-B



PAGE 2-C

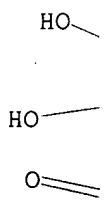


PAGE 3-B

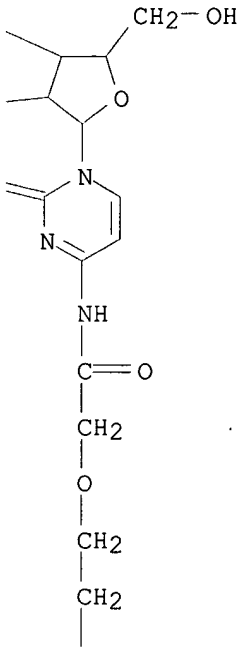


RN 396134-16-0 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), .alpha.-methyl-.omega.-hydroxy-, 1-ether with N-(hydroxyacetyl)-L-aspartoylbis[N1,N4-bis[2-[2-[2-[(1-.beta.-D-arabinofuranosyl-1,2-dihydro-2-oxo-4-pyrimidinyl)amino]-2-oxoethoxy]ethoxy]ethyl]-L-aspartamide] (9CI) (CA INDEX NAME)

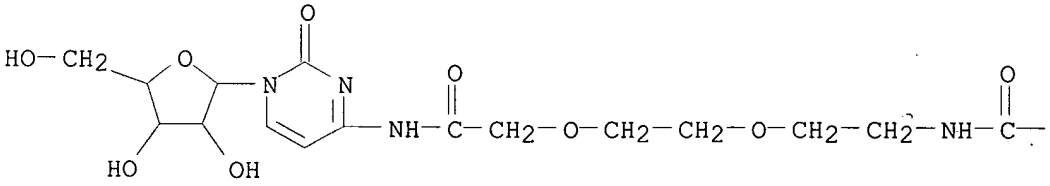
PAGE 1-A



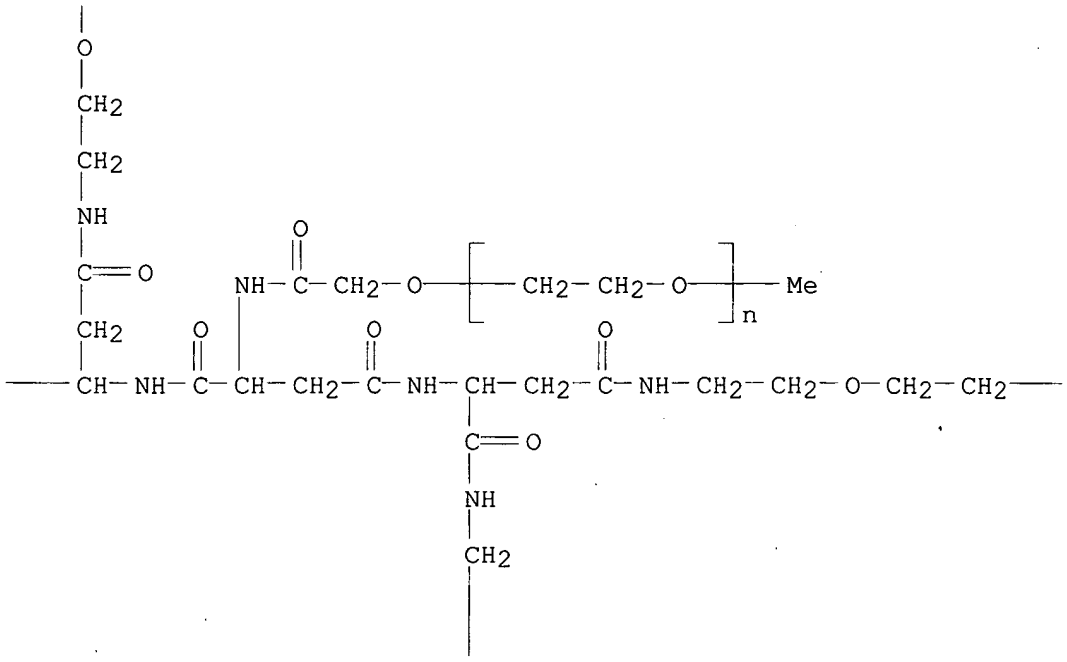
PAGE 1-B



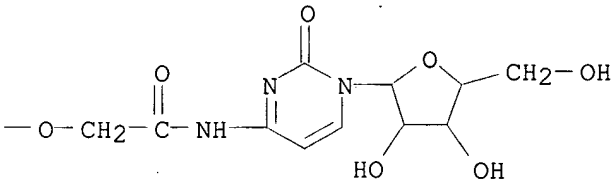
PAGE 2-A



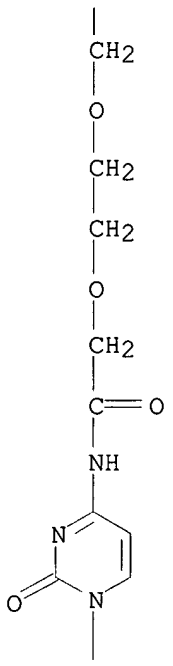
PAGE 2-B



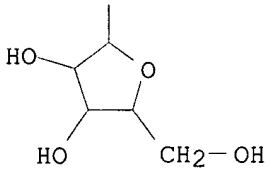
PAGE 2-C



PAGE 3-B

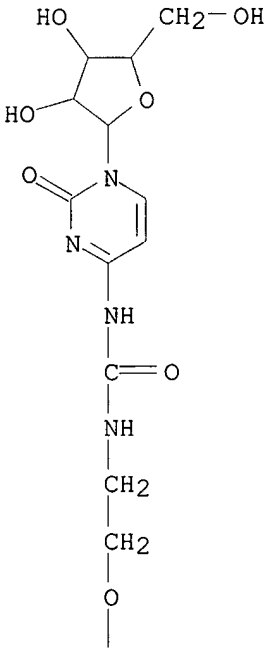


PAGE 4-B

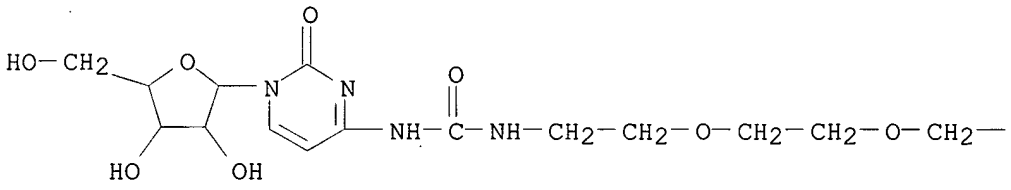


RN 396134-17-1 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), .alpha.-methyl-.omega.-hydroxy-, 1-ether with N-(hydroxyacetyl)-L-aspartoylbis[N1,N4-bis[2-[2-[2-[[[(1-.beta.-D-arabinofuranosyl-1,2-dihydro-2-oxo-4-pyrimidinyl)amino]carbonyl]amino]ethoxy]ethoxy]ethyl]-L-aspartamide] (9CI) (CA INDEX NAME)

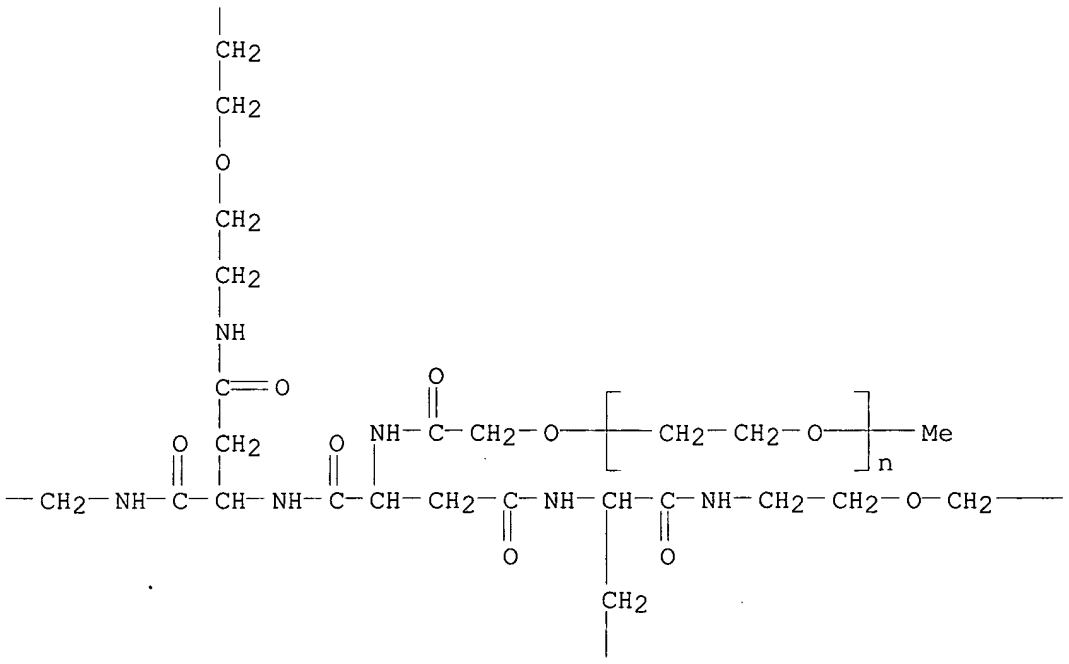
PAGE 1-B



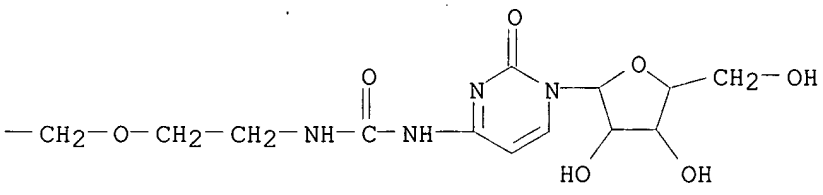
PAGE 2-A



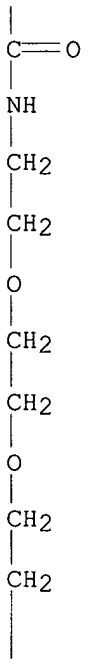
PAGE 2-B



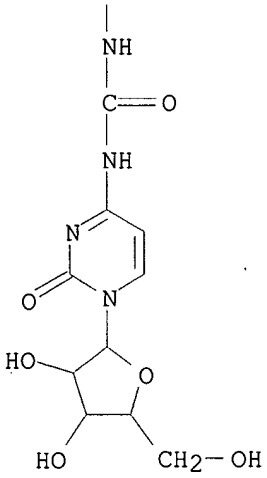
PAGE 2-C



PAGE 3-B

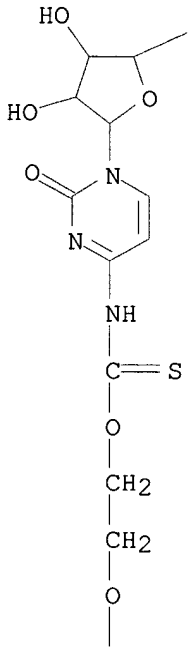


PAGE 4-B

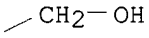


RN 396134-18-2 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), .alpha.-methyl-.omega.-hydroxy-, 1-ether with N-(hydroxyacetyl)-L-aspartoylbis[N1,N4-bis[2-[2-[[(1-.beta.-D-arabinofuranosyl-1,2-dihydro-2-oxo-4-pyrimidinyl)amino]thioxomethoxy]ethoxy]ethyl]-L-aspartamide] (9CI) (CA INDEX NAME)

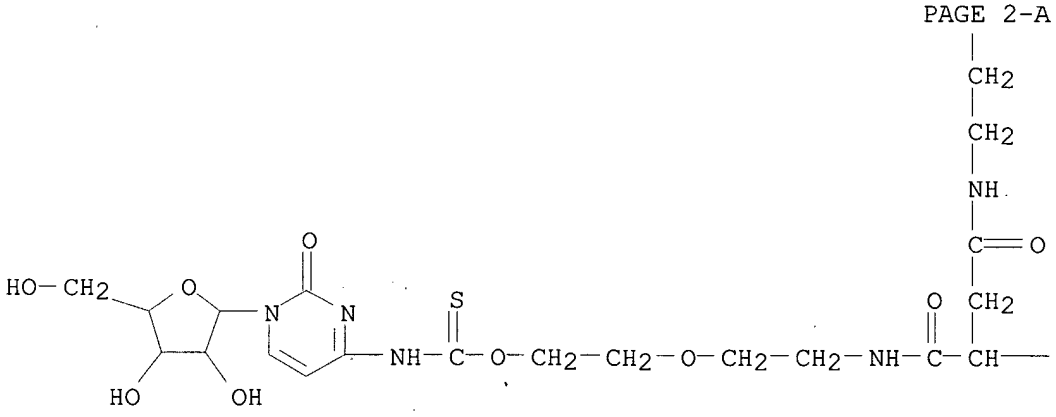
PAGE 1-A



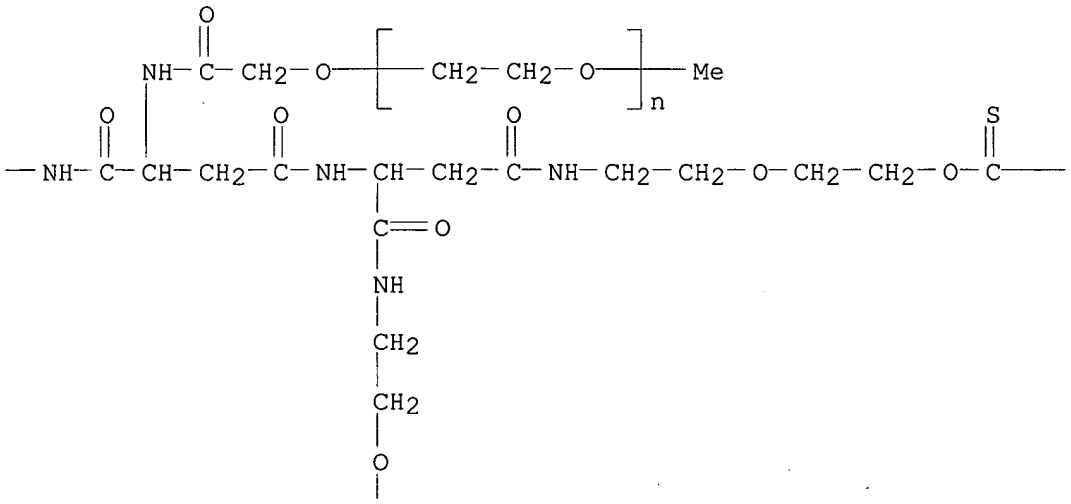
PAGE 1-B



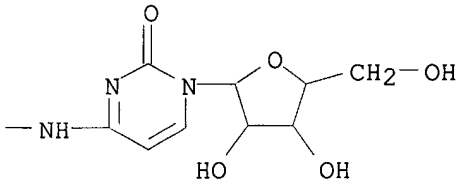
PAGE 2-A



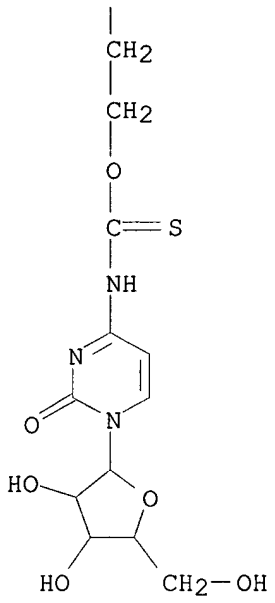
PAGE 2-B



PAGE 2-C

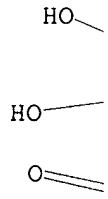


PAGE 3-B

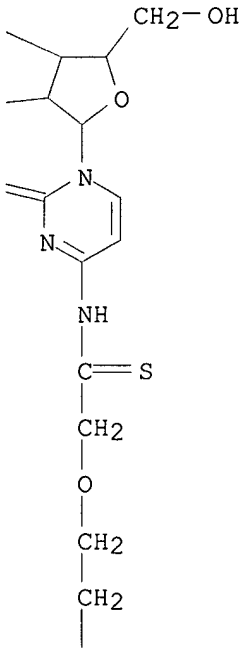


RN 396134-19-3 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), .alpha.-methyl-.omega.-hydroxy-, 1-ether with N-(hydroxyacetyl)-L-aspartoylbis[N1,N4-bis[2-[2-[2-[(1-.beta.-D-arabinofuranosyl-1,2-dihydro-2-oxo-4-pyrimidinyl)amino]-2-thioxoethoxy]ethoxy]ethyl]-L-aspartamide] (9CI) (CA INDEX NAME)

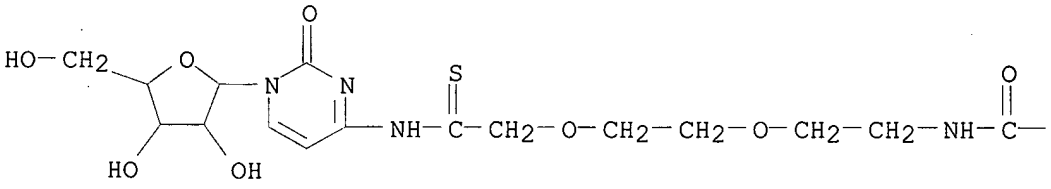
PAGE 1-A



PAGE 1-B



PAGE 2-A



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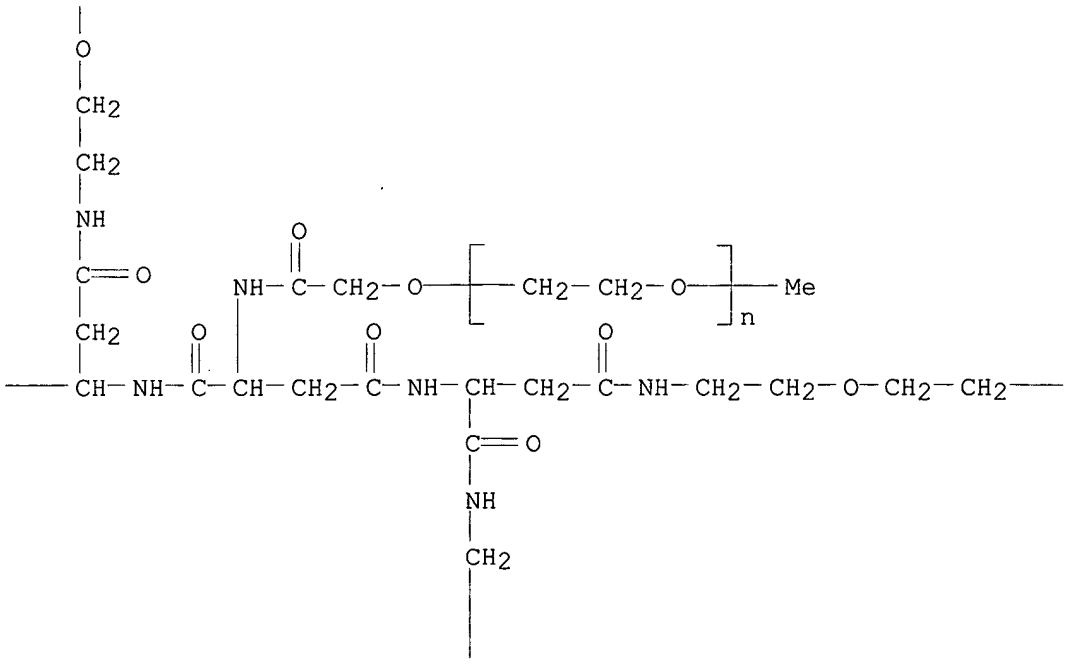

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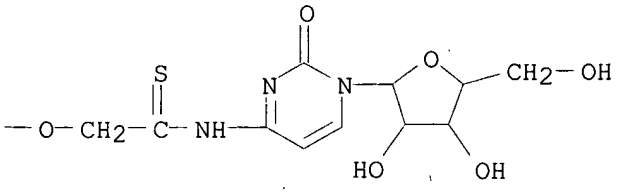

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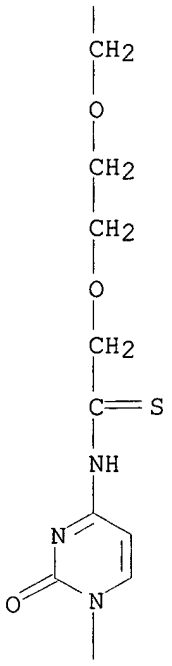

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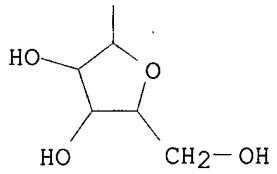

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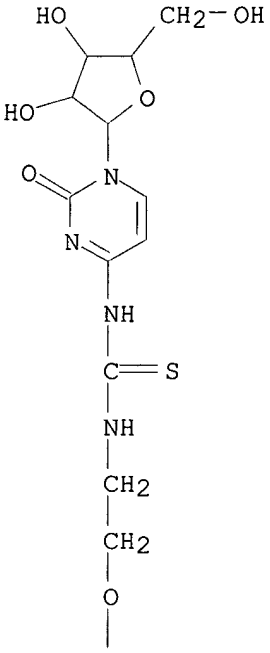
CN Poly(oxy-1,2-ethanediyl), .alpha.-methyl-.omega.-hydroxy-, 1-ether with N-(hydroxyacetyl)-L-aspartoylbis[N1,N4-bis[2-[2-[2-[[[(1-.beta.-D-arabinofuranosyl-1,2-dihydro-2-oxo-4-pyrimidinyl)amino]thioxomethyl]amino]ethoxy]ethoxy]ethyl]-L-aspartamide] (9CI) (CA INDEX NAME)

PAGE 1-B



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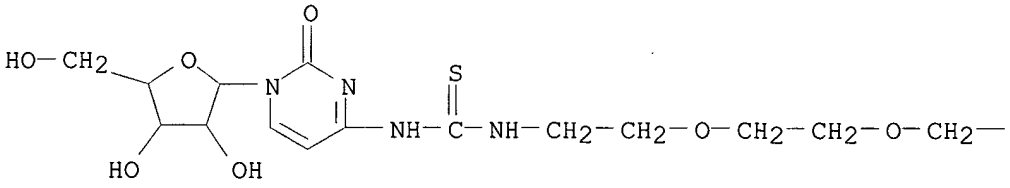

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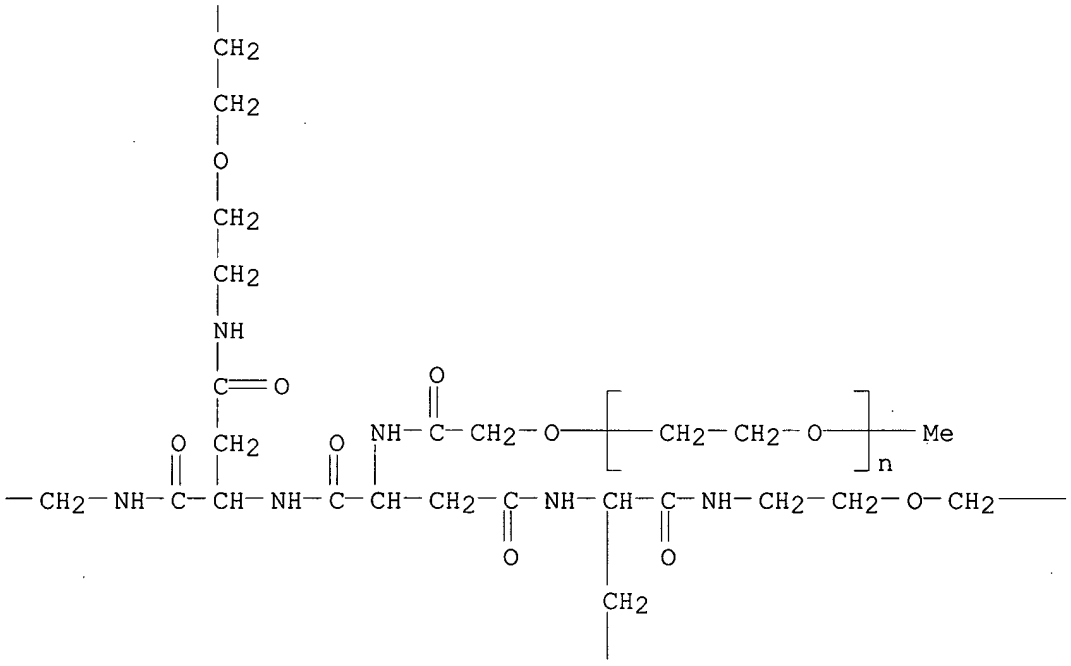

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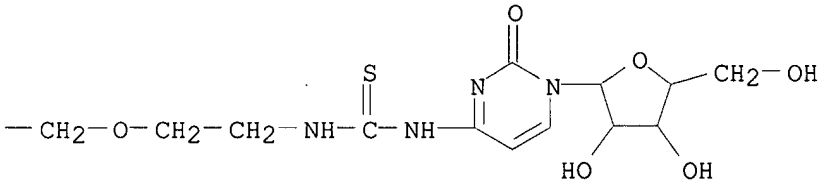

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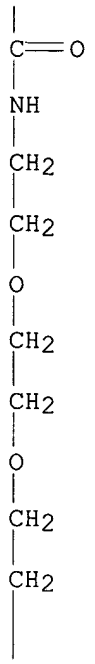

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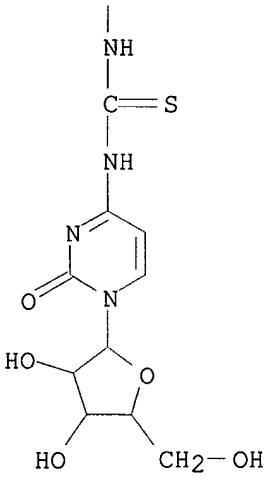

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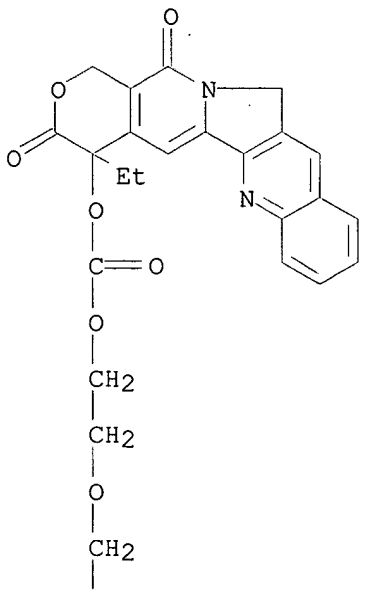
CN Poly(oxy-1,2-ethanediyl), .alpha.-methyl-.omega.-hydroxy-, ether with N-(hydroxyacetyl)-L-aspartoylbis[N1,N4-bis[2-[2-[[[[(4S)-4-ethyl-3,4,12,14-tetrahydro-3,14-dioxo-1H-pyrano[3',4':6,7]indolizino[1,2-b]quinolin-4-yl]oxy]carbonyl]oxy]ethoxy]ethyl]-L-aspartamide] (9CI) (CA INDEX NAME)

PAGE 1-A



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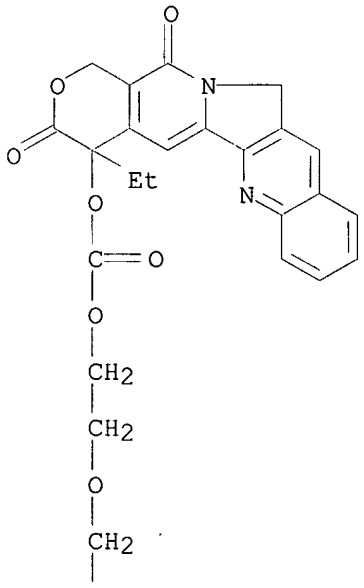

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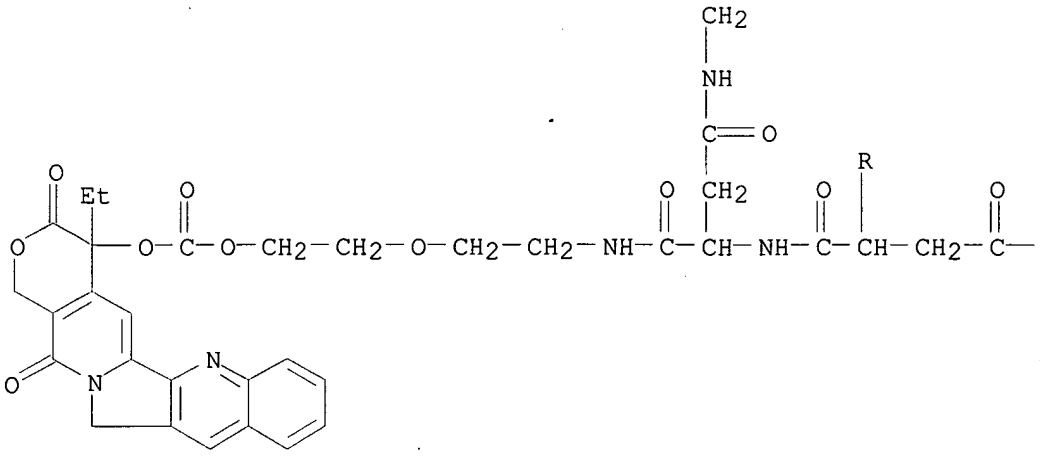

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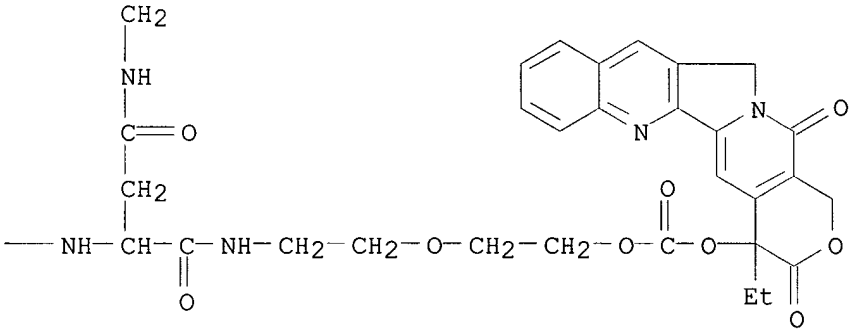

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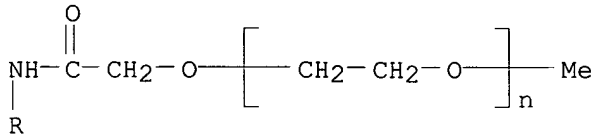
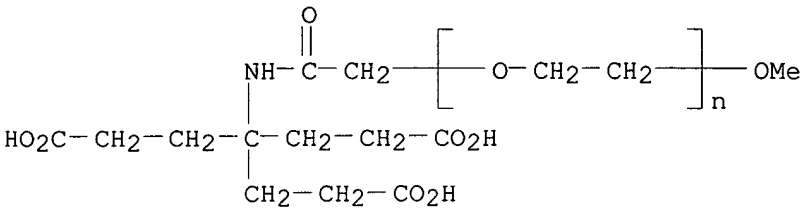
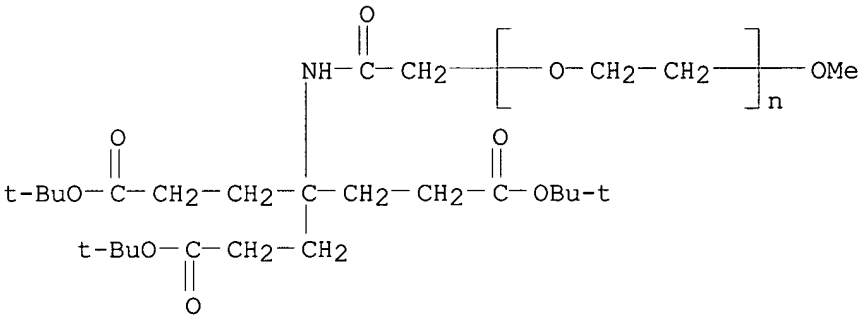


IT **396134-05-7**
RL: RCT (Reactant); RACT (Reactant or reagent)
(terminally-branched polymeric linkers contg. extension moieties for prodrug **conjugates**)
RN 396134-05-7 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), .alpha.-[2-[[3-carboxy-1,1-bis(2-carboxyethyl)propyl]amino]-2-oxoethyl]-.omega.-methoxy- (9CI) (CA INDEX NAME)

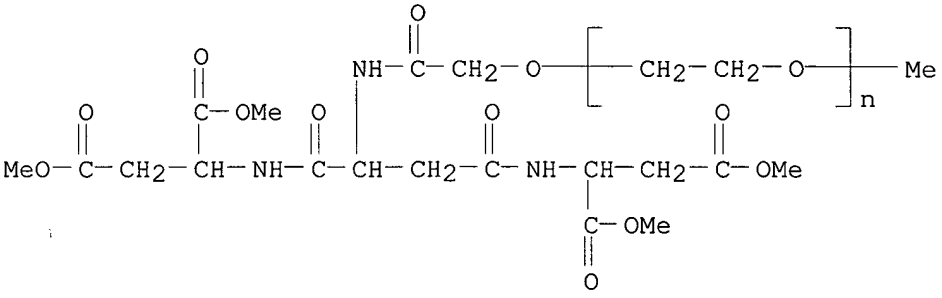


IT **396134-04-6P 396134-13-7P 396134-14-8P**
396134-24-0P 396134-31-9P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(terminally-branched polymeric linkers contg. extension moieties for prodrug **conjugates**)

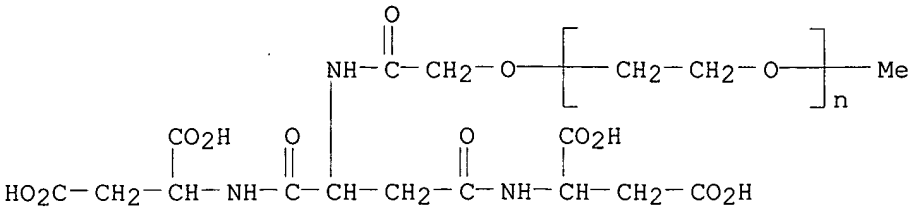
RN 396134-04-6 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), .alpha.-[2-[[4-(1,1-dimethylethoxy)-1,1-bis[3-(1,1-dimethylethoxy)-3-oxopropyl]-4-oxobutyl]amino]-2-oxoethyl]-.omega.-methoxy- (9CI) (CA INDEX NAME)



RN 396134-13-7 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), .alpha.-methyl-.omega.-hydroxy-, ether with N-(hydroxyacetyl)-L-aspartoylbis[L-aspartic acid] tetramethyl ester (9CI) (CA INDEX NAME)

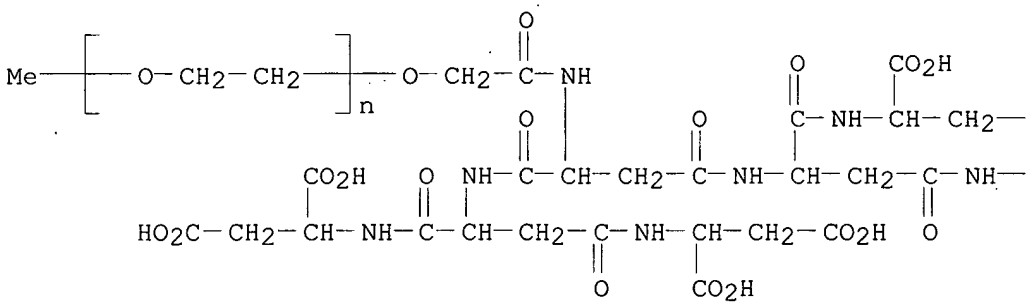


RN 396134-14-8 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), .alpha.-methyl-.omega.-hydroxy-, ether with N-(hydroxyacetyl)-L-aspartoylbis[L-aspartic acid] (9CI) (CA INDEX NAME)



RN 396134-24-0 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), .alpha.-methyl-.omega.-hydroxy-, ether with N-(hydroxyacetyl)-L-aspartoylbis[L-aspartoylbis[L-aspartic acid]] (9CI) (CA INDEX NAME)

PAGE 1-A



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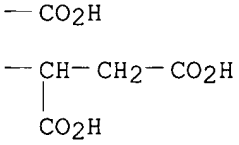
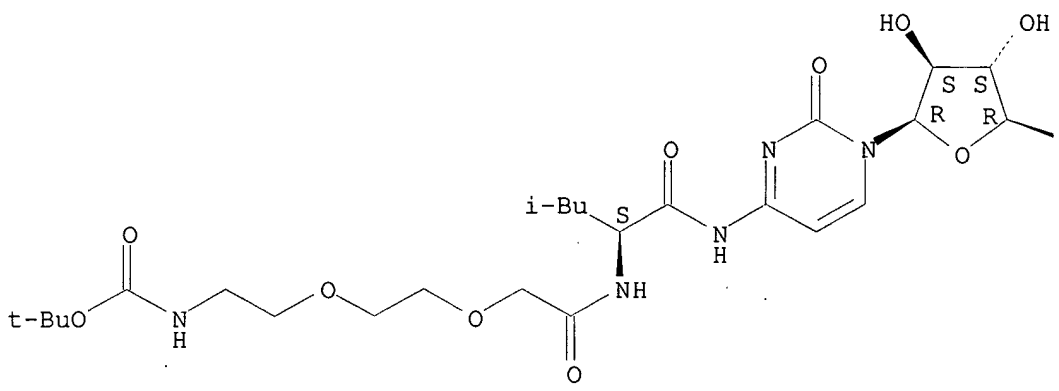


RN 396134-31-9 HCAPLUS
CN 5,8-Dioxa-2,11-diazapentadecanoic acid, 12-[[(1-.beta.-D-arabinofuranosyl-1,2-dihydro-2-oxo-4-pyrimidinyl)amino]carbonyl]-14-methyl-10-oxo-, 1,1-dimethylethyl ester, (12S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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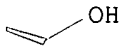


L6 ANSWER 3 OF 33 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2002:107165 HCAPLUS
DOCUMENT NUMBER: 136:172754
TITLE: Highly reactive branched polymer and proteins or peptides **conjugated** with the polymer
INVENTOR(S): Park, Myung-Ok; Lee, Kang-Choon; Cho, Sung-hHe
PATENT ASSIGNEE(S): S. Korea
SOURCE: PCT Int. Appl., 47 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002009766	A1	20020207	WO 2001-KR1209	20010713

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

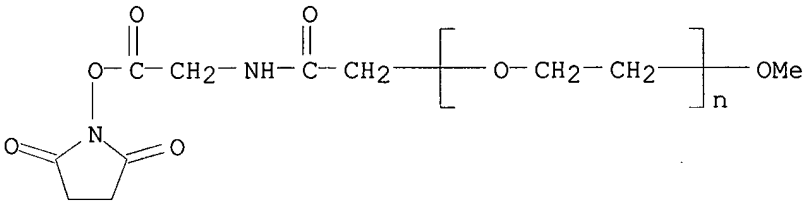
PRIORITY APPLN. INFO.: KR 2000-44046 A 20000729

AB The present invention relates to new biocompatible polymer derivs., and a protein-polymer or a peptide-polymer which is produced by **conjugation** of biol. active protein and peptide with the biocompatible polymer derivs. More particularly, the present invention

relates to a highly reactive branched biocompatible polymer deriv. contg. a long **linker** between polymer derivs. and protein or peptide mols., which is minimized in decrease the biol. activity of proteins by **conjugating** the less no. of polymer derivs. to the active sites of proteins, improved in water soly., and protected from being degraded by protease. In hence, the highly reactive branched biocompatible polymer-proteins or peptides **conjugates** with long **linker** retain the biol. activity for a long period of time and improve a bioavailability of bioactive proteins and peptides. For example, activated PEG-interferon **conjugates** were prepd. by adding 3 mg of succinic N-hydroxysuccinimidyl di-PEG to 3 mg of interferon in 0.1 M phosphate buffer soln., pH 7.0 at ambient temp. The reaction was stopped with 0.1 M glycine and the excess reagents were using Centricon-30.

IT **395645-04-2P 395645-05-3P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(highly reactive branched polymers and their **conjugates** with proteins or peptides)

RN 395645-04-2 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), .alpha.-[2-[[2-[(2,5-dioxo-1-pyrrolidinyl)oxy]-2-oxyethyl]amino]-2-oxoethyl]-.omega.-methoxy- (9CI) (CA INDEX NAME)



RN 395645-05-3 HCAPLUS
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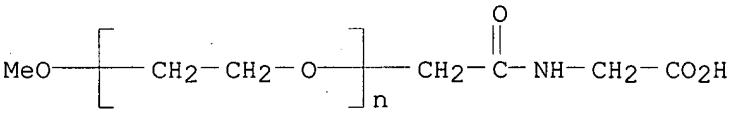
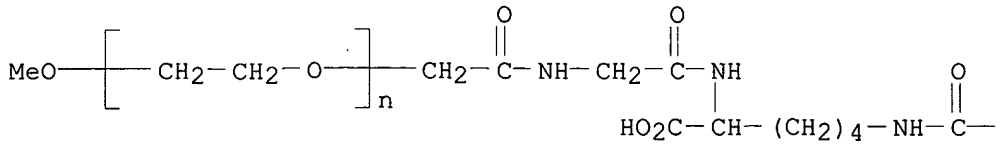


IT **395645-06-4P 395645-07-5P 395645-08-6P 395645-09-7P**
RL: RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(highly reactive branched polymers and their **conjugates** with proteins or peptides)

RN 395645-06-4 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-methoxy-, diether with N2,N6-bis[N-(hydroxyacetyl)glycyl]-L-lysine (9CI) (CA INDEX NAME)

PAGE 1-A



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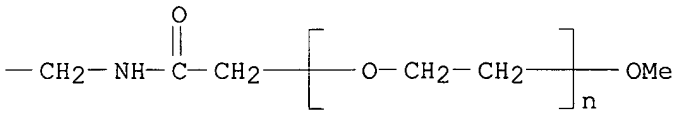
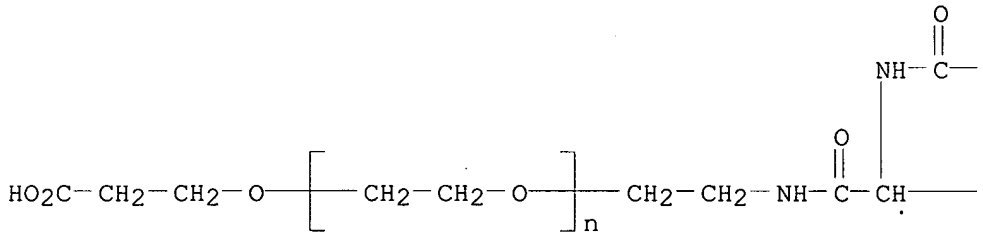


RN 395645-07-5 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-methoxy-, N2,N6-diether with N2,N6-bis[N-(hydroxyacetyl)glycyl]-N-(2-hydroxyethyl)-L-lysinamide, ether with .alpha.-hydro-.omega.-(2-carboxyethoxy)poly(oxy-1,2-ethanediyl) (9CI) (CA INDEX NAME)

PAGE 1-A



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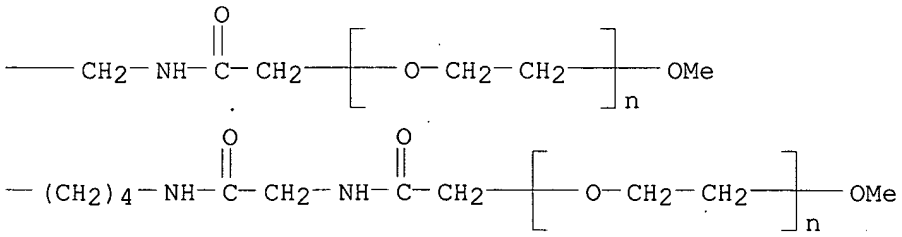

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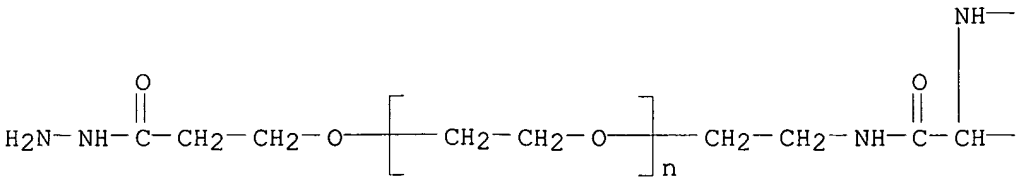
CN Poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-methoxy-, N2,N6-diether with N2,N6-bis[N-(hydroxyacetyl)glycyl]-N-(2-hydroxyethyl)-L-lysinamide, ether with .alpha.-hydro-.omega.-(3-hydrazino-3-oxopropoxy)poly(oxy-1,2-ethanediyl) (9CI) (CA INDEX NAME)

PAGE 1-A



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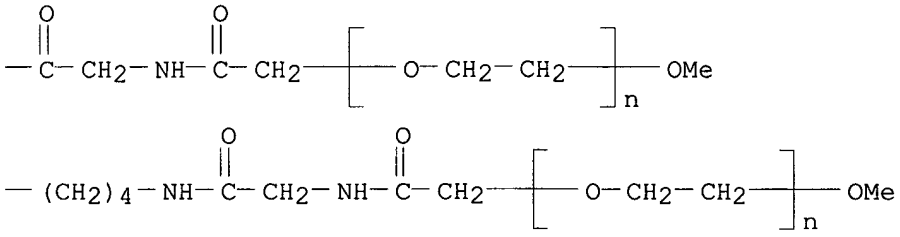
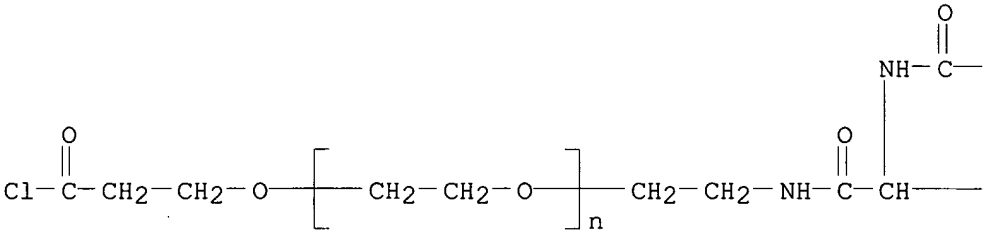


RN 395645-09-7 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-methoxy-, N2,N6-diether with N2,N6-bis[N-(hydroxyacetyl)glycyl]-N-(2-hydroxyethyl)-L-lysinamide, ether with .alpha.-hydro-.omega.-(3-chloro-3-oxopropoxy)poly(oxy-1,2-ethanediyl) (9CI) (CA INDEX NAME)

PAGE 1-A



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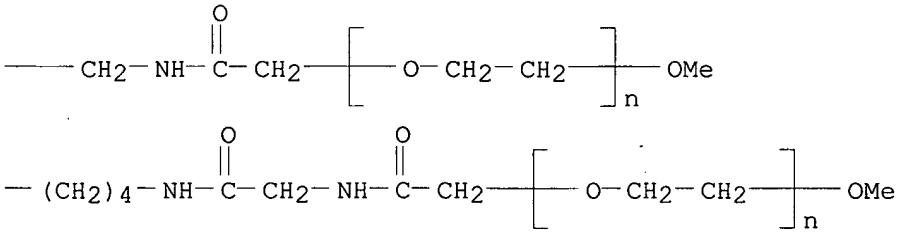
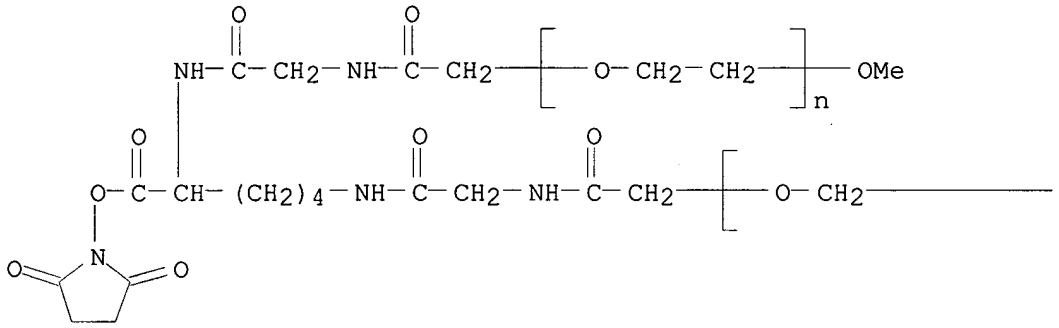


IT **395645-02-0DP, conjugates** with peptides or proteins
395645-03-1DP, conjugates with peptides or proteins
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological

study); PREP (Preparation); USES (Uses).
(highly reactive branched polymers and their **conjugates** with proteins or peptides)

RN 395645-02-0 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-methoxy-, diether with 1-[[N2,N6-bis[N-(hydroxyacetyl)glycyl]-L-lysyl]oxy]-2,5-pyrrolidinedione (9CI) (CA INDEX NAME)

PAGE 1-A



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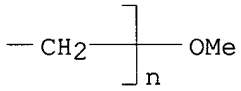
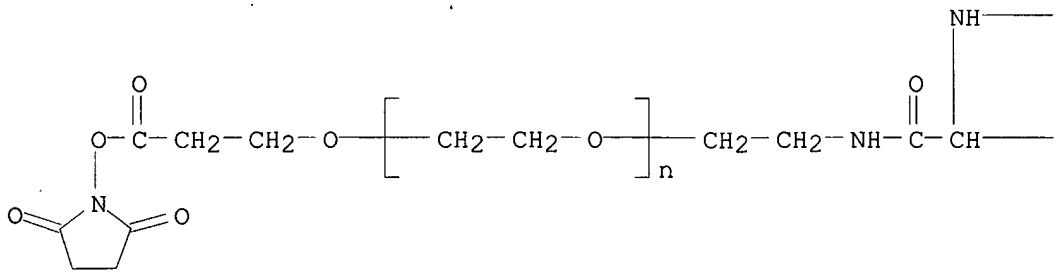


RN 395645-03-1 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-methoxy-, N2,N6-diether with N2,N6-bis[N-(hydroxyacetyl)glycyl]-N-(2-hydroxyethyl)-L-lysinamide, ether with .alpha.-hydro-.omega.-[3-[(2,5-dioxo-1-pyrrolidinyl)oxy]-3-oxopropoxy]poly(oxy-1,2-ethanediyl) (9CI) (CA INDEX NAME)

PAGE 1-A



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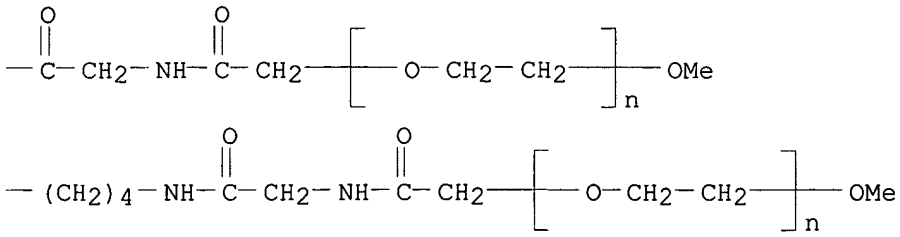


REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 4 OF 33 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2002:51488 HCAPLUS
DOCUMENT NUMBER: 136:130545
TITLE: Linked oligopyrrole oligomers with sequence-specific DNA-binding activity
INVENTOR(S): Laemmli, Ulrich; Janssen, Samuel
PATENT ASSIGNEE(S): Universite de Geneve, Switz.
SOURCE: PCT Int. Appl., 111 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002004476	A2	20020117	WO 2001-EP9032	20010711

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2000-614036 A 20000711

AB The present invention concerns DNA-binding mols. capable of sequence-specific binding to the minor groove of double-stranded DNA. The mols. comprise at least two sequence-specific DNA-binding elements comprising oligomers of heterocyclic amino acids, covalently linked to each other in tandem orientation by an amphipathic, flexible **linker** mol. such as 8-amino-3,6-dioxaoctanoic acid or 5-aminovaleric acid. Thus, oligopyrrole monomers are joined by a short or long **linker** comprising three or a single ethylene oxide **spacer** amino acid, which allows bidentate binding of both oligopyrrole moieties to long or bipartite AT-tracts of 15-18 bases and which also confer soly. to the DNA-binding mol. The dimers are highly SAR (scaffold attachment region) and AT-specific. Hairpin-shaped tandem-linked mols. are also designed to target 5'-ggttaggtta-3' sequences and insect-type telomere repeats (5'-ttaggttagg-3'). Sequence-specific minor groove-binding polyamides are novel tools to address issues of chromosomal structure, dynamics, and the biol. functions of nongenic DNA. When labeled with fluorescent dyes, they are of value on chromosome straining and visualization and as markers in diagnosis, forensic studies,

affiliation studies, and animal husbandry.

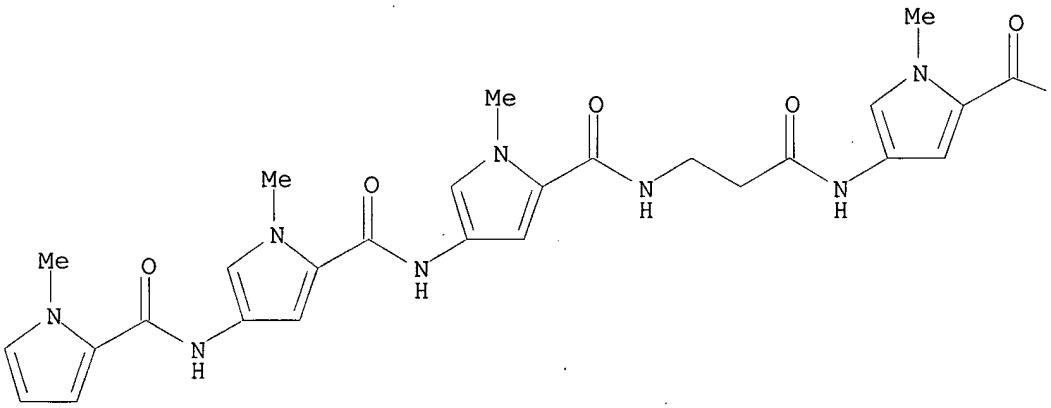
IT **346414-59-3P 389570-36-9P 389570-37-0P**
RL: BSU (Biological study, unclassified); BUU (Biological use, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(linked oligopyrrole oligomers with sequence-specific DNA-binding activity)

RN 346414-59-3 HCAPLUS

CN 3,6,12,15,21,24-Hexaoxa-9,18,27-triazadotriacontanediamide, 29-(acetylamino)-N1-[5-[[[5-[[[5-[[[5-[[[5-[[[3-[[3-(dimethylamino)propyl]amino]-3-oxopropyl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]-N32-[3-[methyl[3-[[3-[[[1-methyl-4-[[[1-methyl-4-[[[1-methyl-4-[[3-[[[1-methyl-4-[[[1-methyl-4-[[(1-methyl-1H-pyrrol-2-yl)carbonyl]amino]-1H-pyrrol-2-yl]carbonyl]amino]-1H-pyrrol-2-yl]carbonyl]amino]-1-oxopropyl]amino]-1H-pyrrol-2-yl]carbonyl]amino]-1H-pyrrol-2-yl]carbonyl]amino]-1H-pyrrol-2-yl]carbonyl]amino]propyl]amino]propyl]-10,19,28-trioxo-, (29S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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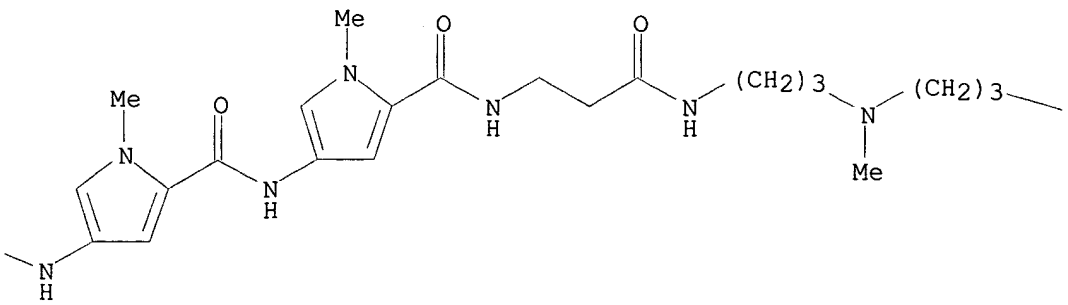

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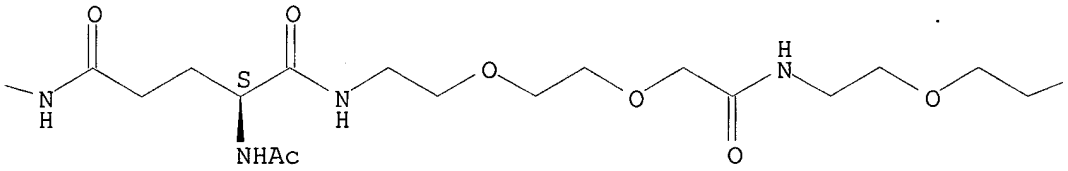

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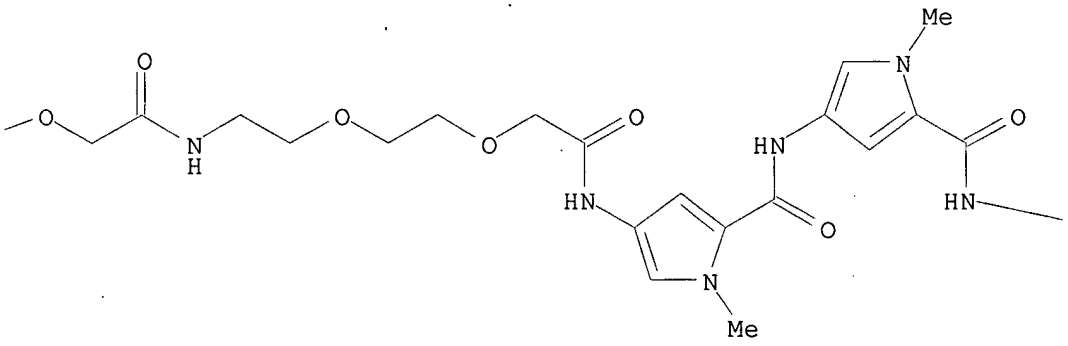

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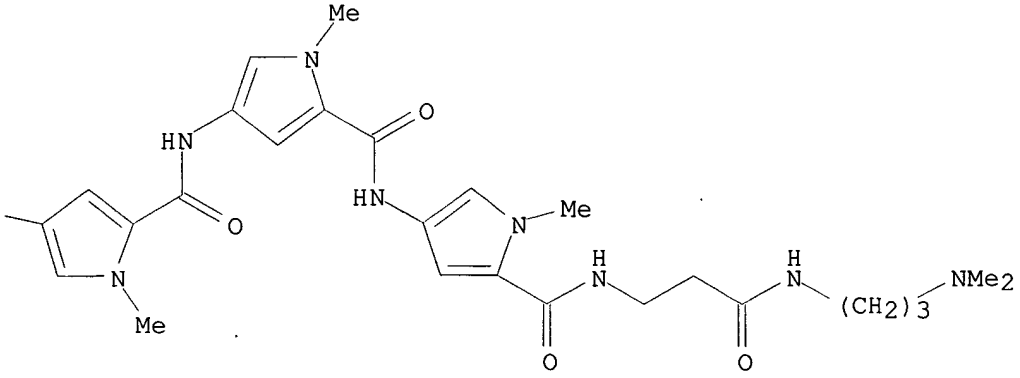

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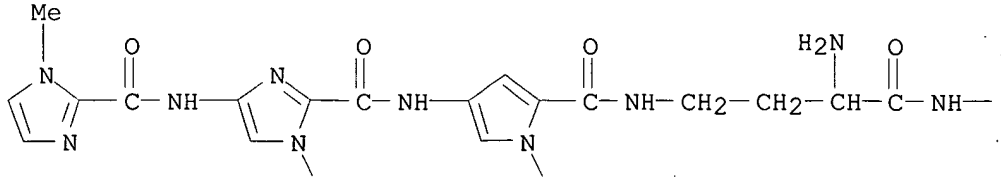
PAGE 1-A



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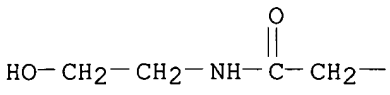

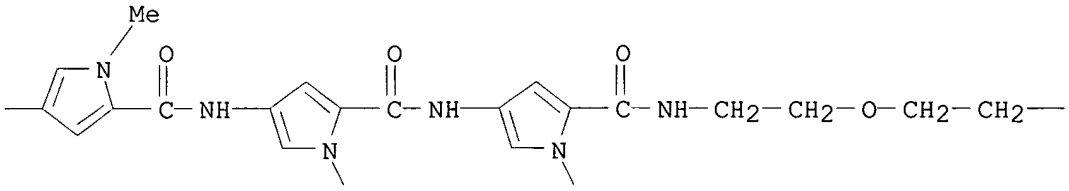

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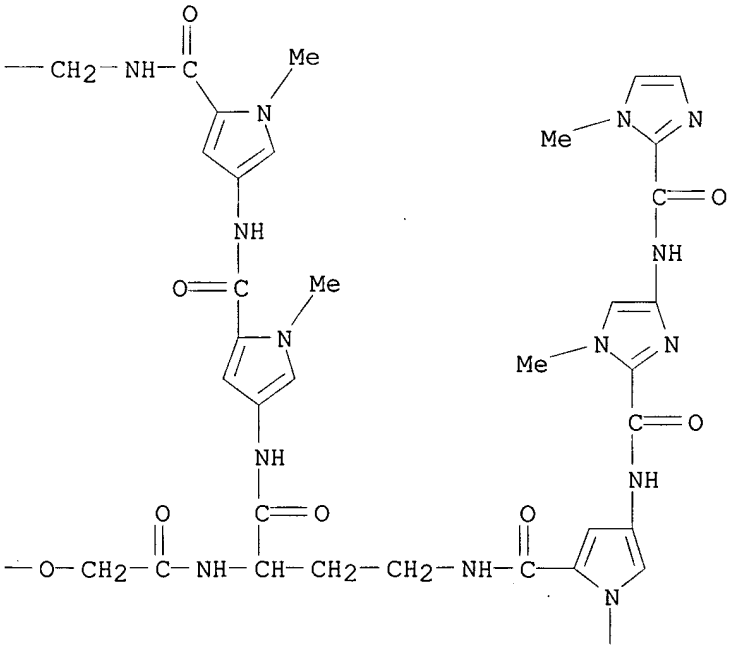

PAGE 2-A

PAGE 2-B

PAGE 2-C

RN 389570-37-0 HCAPLUS
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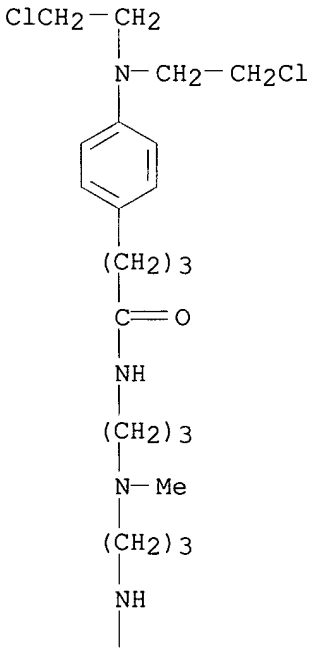
PAGE 1-C



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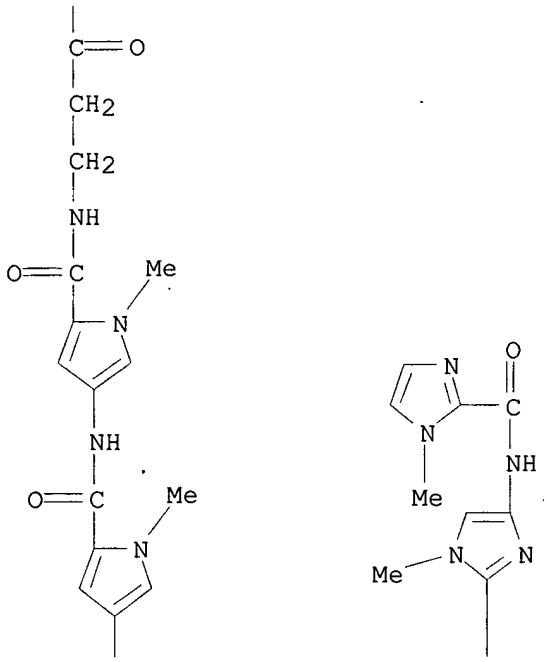

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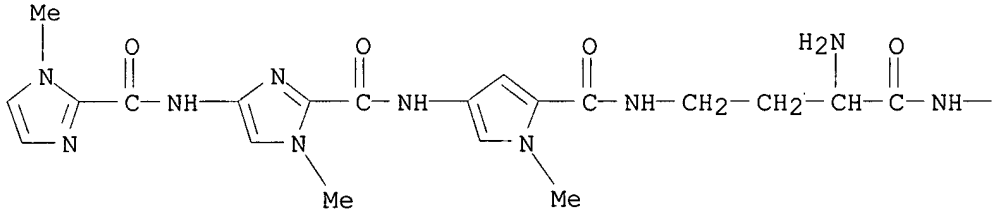

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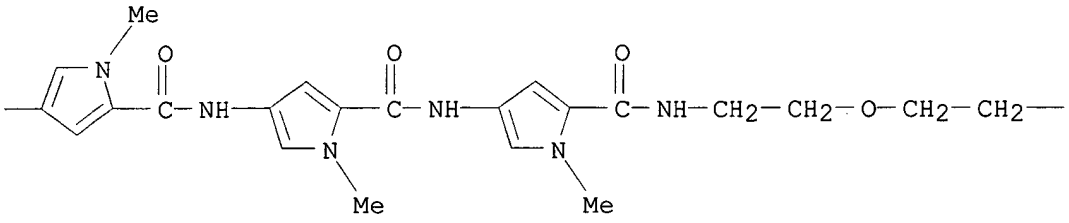

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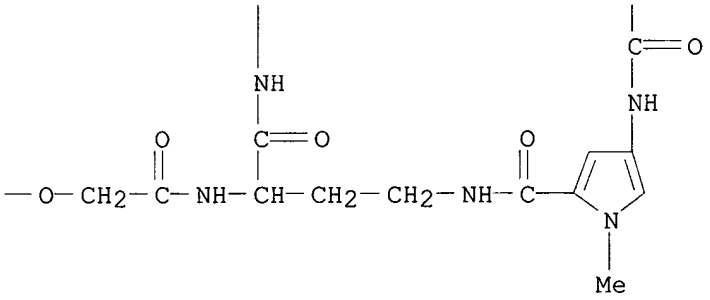


L6 ANSWER 5 OF 33 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2002:4992 HCAPLUS
DOCUMENT NUMBER: 136:241803
TITLE: Membrane-active properties of .alpha.-MSH analogs: aggregation and fusion of liposomes triggered by surface-**conjugated** peptides
AUTHOR(S): Lima de Souza, Debora; Frisch, Benoit; Duportail, Guy; Schuber, Francis
CORPORATE SOURCE: Laboratoire de Chimie Bioorganique, Universite Louis Pasteur, Faculte de Pharmacie, UMR 7514 CNRS/ULP, Illkirch, 67400, Fr.
SOURCE: Biochimica et Biophysica Acta (2002), 1558(2), 222-237 CODEN: BBACAQ; ISSN: 0006-3002
PUBLISHER: Elsevier Science B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Reaction of the melanotropin hormone analogs [Nle4,D-Phe7]-.alpha.-MSH and [Nle4,D-Phe7]-.alpha.-MSH(4-10), which were extended at their N-terminus by a thiol-functionalized **spacer** arm, with preformed liposomes contg. thiol-reactive (phospho)lipid derivs. resulted in the aggregation of the vesicles and in a partial leakage of their inner contents. This aggregation/leakage effect, which was only obsd. when the peptides were covalently **conjugated** to the surface of the liposomes, was correlated with the fusion of the vesicles as demonstrated by the obsd. decrease in resonance energy transfer between probes in a membrane lipid mixing assay. A limited fusion was confirmed by monitoring the mixing of the liposome inner contents (formation of 1-aminonaphthalene-3,6,8-trisulfonic acid/p-xylene bis(pyridinium bromide) complex). The

membrane-active properties of the peptides could be correlated with changes in the fluorescence emission spectra of their tryptophan residue, which suggested that after their covalent binding to the outer surface of the liposomes they can partition within the core of the bilayers. A blue shift of 10 nm was obsd. for [Nle4,D-Phe7]-.alpha.-MSH which was correlated with an increase in fluorescence anisotropy and with changes in the accessibility of the coupled peptide as assessed by the quenching of fluorescence of its tryptophan residue by iodide (Stern-Volmer plots). These results should be related to the previously described capacity of .alpha.-MSH, and analogs, to interact with membranes and with the favored conformation of these peptides which, via a .beta.-turn, segregate their central hydrophobic residues into a domain that could insert into membranes and, as shown here, trigger their destabilization.

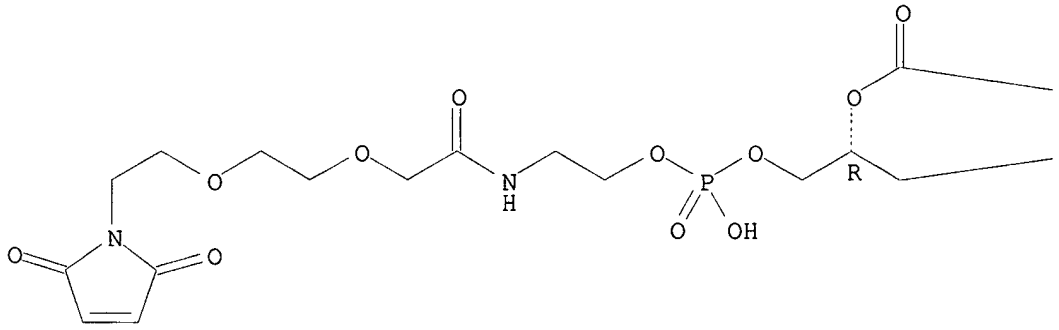
IT **404354-28-5**
RL: BUU (Biological use, unclassified); PEP (Physical, engineering or chemical process); BIOL (Biological study); PROC (Process); USES (Uses)
(aggregation and fusion of liposomes triggered by surface-**conjugated** peptides in membrane-active properties of .alpha.-MSH analogs)

RN 404354-28-5 HCAPLUS

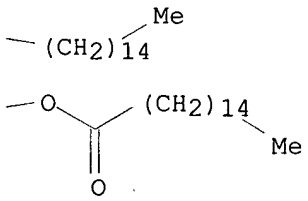
CN Hexadecanoic acid, (1R)-1-[15-(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)-3-hydroxy-3-oxido-8-oxo-2,4,10,13-tetraoxa-7-aza-3-phosphapentadec-1-yl]-1,2-ethanediyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



REFERENCE COUNT: 63 THERE ARE 63 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 6 OF 33 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2001:889297 HCAPLUS
DOCUMENT NUMBER: 136:167609

TITLE: Synthesis of Novel Glycolipids That Bind HIV-1 Gp120
AUTHOR(S): LaBell, Rachel Y.; Jacobsen, Neil E.; Gervay-Hague, Jacquelyn; O'Brien, David F.
CORPORATE SOURCE: Department of Chemistry, The University of Arizona, Tucson, AZ, 85721, USA
SOURCE: Bioconjugate Chemistry (2002), 13(1), 143-149
CODEN: BCCHES; ISSN: 1043-1802
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English

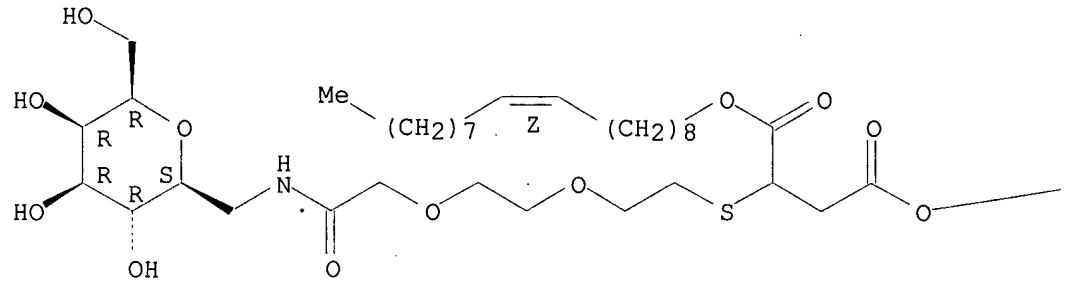
AB As part of a research effort to design and prep. high affinity ligands for the **galactosyl** ceramide (GalCer) binding site on the HIV cell surface glycoprotein, gp120, several GalCer analogs have been prepd. and characterized. The mol. design of analogs permits independent variations of the carbohydrate, the length of a hydrophilic **spacer** between the ligand and the lipid, and the compn. of the hydrophobic lipid chains. Five different **galactosyl** analogs were synthesized having hydrophilic spacers of tri-, tetra-, and penta-ethylene glycol sepg. the carbohydrate from the lipid region which has either oleoyl or stearoyl lipid chains. The synthetic design allows for a convergent synthesis of the three components of the glycolipid **conjugate**. The structural characterization includes the proton and carbon chem. shifts, which were assigned after anal. of 1D and 2D NMR spectra.

IT **359442-78-7P 359442-79-8P 359442-80-1P**
396106-55-1P 396106-56-2P
RL: BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(synthesis and structure-activity of glycolipids that bind HIV-1 cell surface glycoprotein Gp120)

RN 359442-78-7 HCAPLUS
CN L-glycero-L-galacto-Heptitol, 2,6-anhydro-7-deoxy-7-[[(22Z)-10-[[[(9Z)-9-octadecenyl]oxy]carbonyl]-1,12-dioxo-3,6,13-trioxa-9-thiahentriacont-22-en-1-yl]amino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

PAGE 1-A



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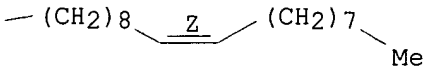

RN 359442-79-8 HCAPLUS
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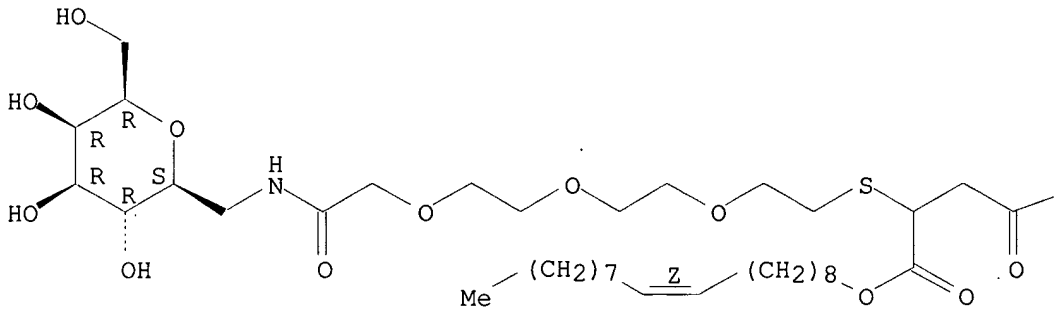
Absolute stereochemistry.
Double bond geometry as shown.

PAGE 1-A



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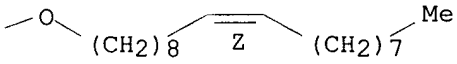

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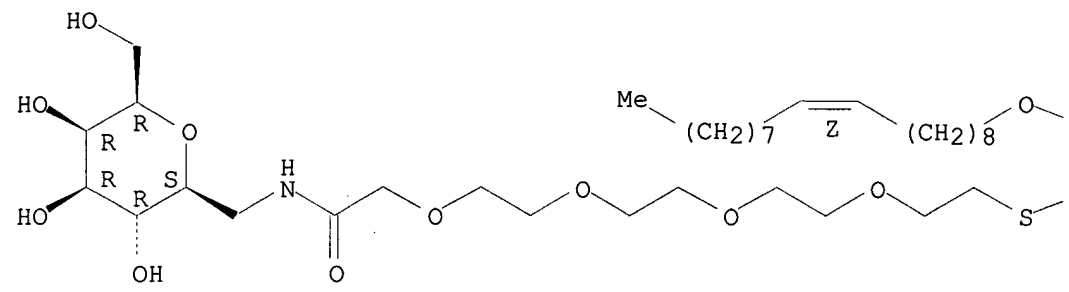
Absolute stereochemistry.
Double bond geometry as shown.

PAGE 1-A



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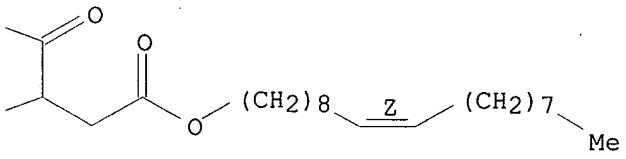
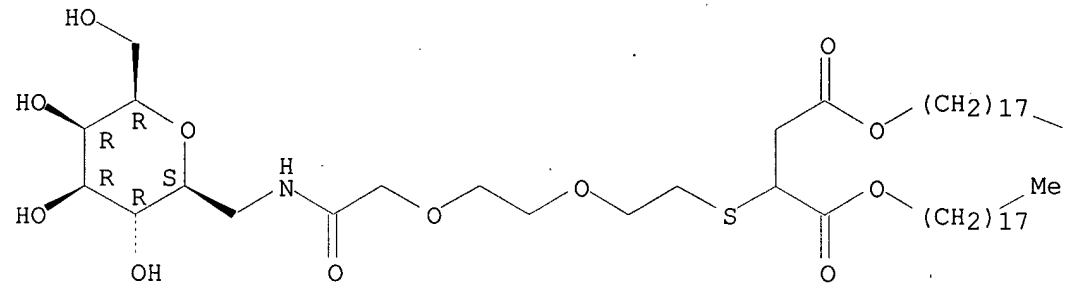


RN 396106-55-1 HCAPLUS
CN L-glycero-L-galacto-Heptitol, 2,6-anhydro-7-deoxy-7-[[10-[(octadecyloxy)carbonyl]-1,12-dioxo-3,6,13-trioxa-9-thiahentriacont-1-yl]amino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

RN 396106-56-2 HCAPLUS
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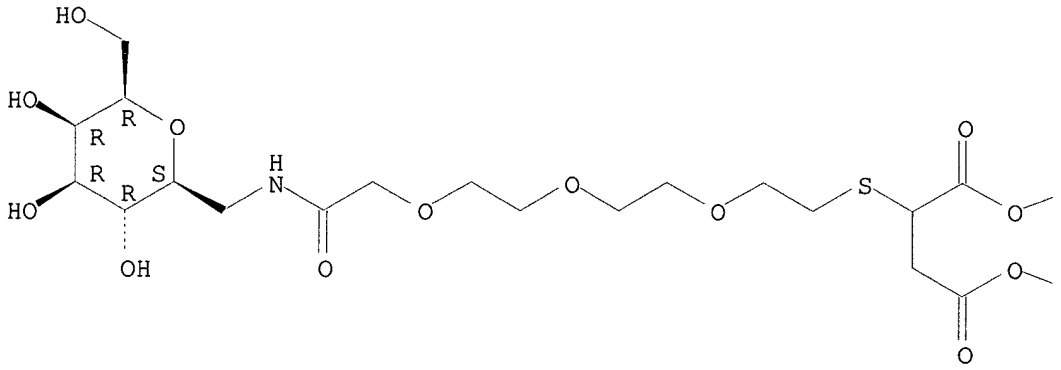
1-yl]amino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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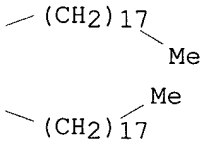

REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 7 OF 33 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2001:885834 HCAPLUS
DOCUMENT NUMBER: 136:25104
TITLE: Peptide-containing compounds for targeting endothelial cells, compositions containing the same and methods for their use
INVENTOR(S): Von Wronski, Mathew A.; Marinelli, Edmund R.; Nunn, Adrian D.; Pillai, Radhakrishna; Ramalingam, Kondareddiar; Tweedle, Michael F.; Linder, Karen; Nanjappan, Palaniappa; Raju, Natarajan
PATENT ASSIGNEE(S): Bracco Research USA, USA
SOURCE: PCT Int. Appl., 146 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001091805	A2	20011206	WO 2001-US18053	20010604

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RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2000-585364 A2 20000602

OTHER SOURCE(S): MARPAT 136:25104

AB The present invention provides compds. for targeting endothelial cells, tumor cells or other cells that express the neuropilin-1 (NP-1) receptor, compns. contg. the same and methods for their use. The compds. are of the formula A-L-B (A = TKPPR or analog which specifically binds to an endothelial cell or cells that express markers in common with endothelial cells, with equal or greater avidity as TKPPR; L = a lipid or a non-lipid (polymer) **linker**; B = a substrate). Addnl., the present invention includes diagnostic, therapeutic and radiotherapeutic compns. useful for visualization, therapy or radiotherapy. For example, DPPE-glutaroyl-Gly-Thr-Lys-Pro-Pro-Arg-OH (DPPE-Glu-GTKPPR) was prepd. and formulated into gas-filled microbubble compns. for ultrasonic echog. The bubbles interact with a VEGF receptor on human aortic endothelial cells (HAEC), possibly with KDR receptor, or more likely with NP-1 receptor which binds to KDR.

IT **377087-54-2P 377087-63-3P**

RL: DGN (Diagnostic use); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

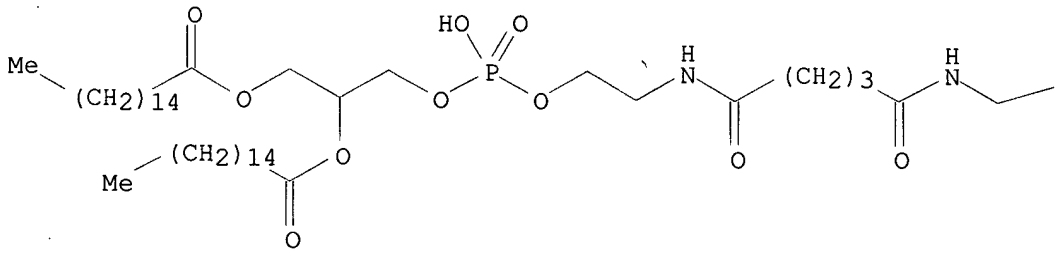
(prepn. of peptide-contg. compds. and compns. for targeting endothelial cells expressing neuropilin-1 receptor for diagnosis and therapy)

RN 377087-54-2 HCAPLUS

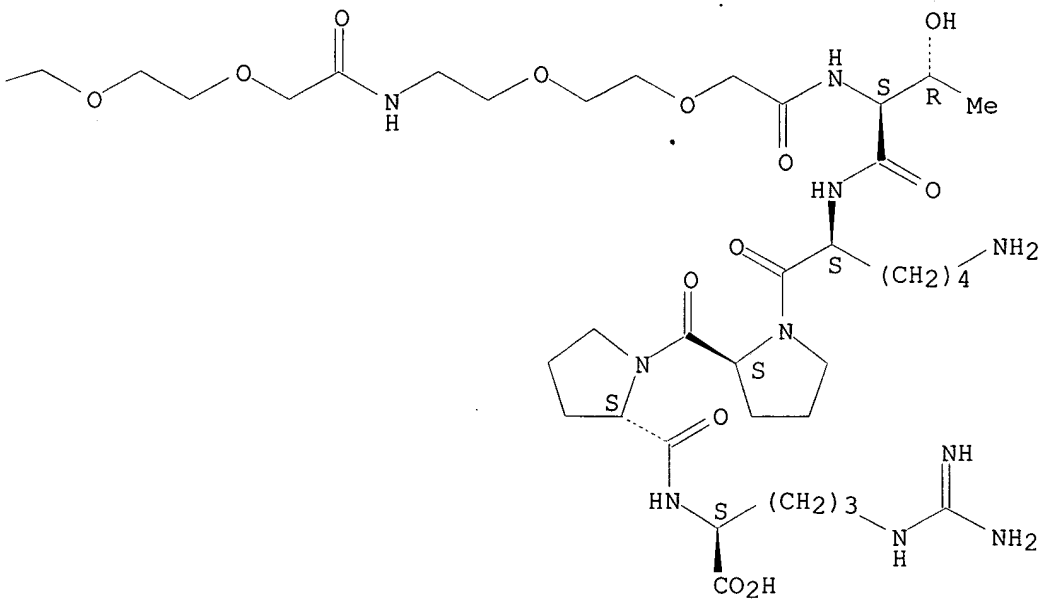
CN L-Arginine, N-[28-hydroxy-28-oxido-1,10,19,23,34-pentaoxo-31-[(1-oxohexadecyl)oxy]-3,6,12,15,27,29,33-heptaoxa-9,18,24-triaza-28-phosphanonatetracont-1-yl]-L-threonyl-L-lysyl-L-prolyl-L-prolyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



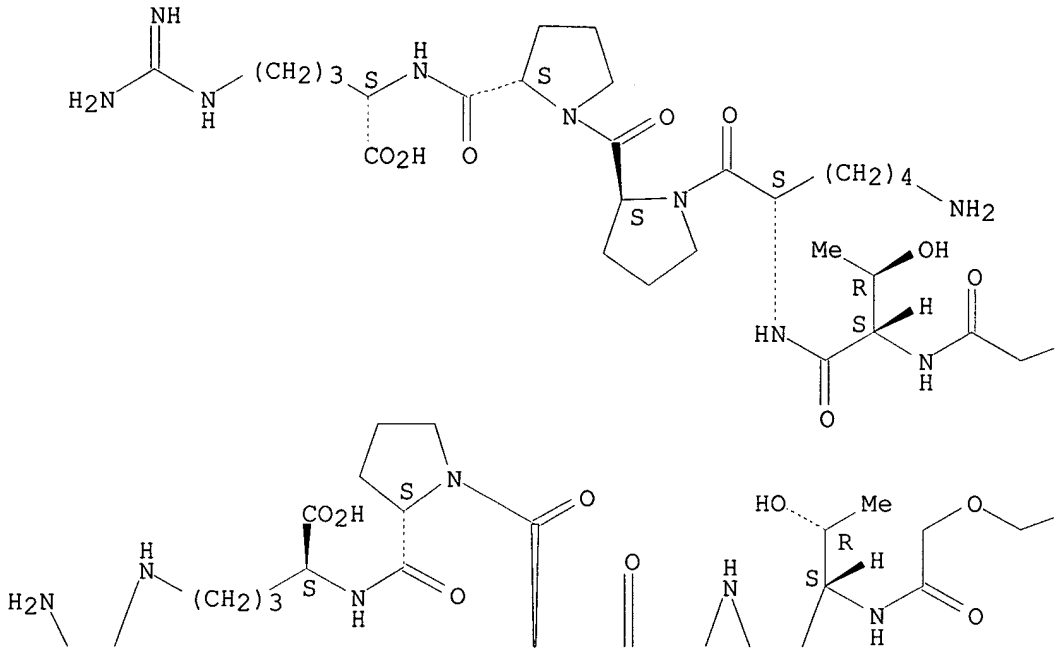
PAGE 1-B



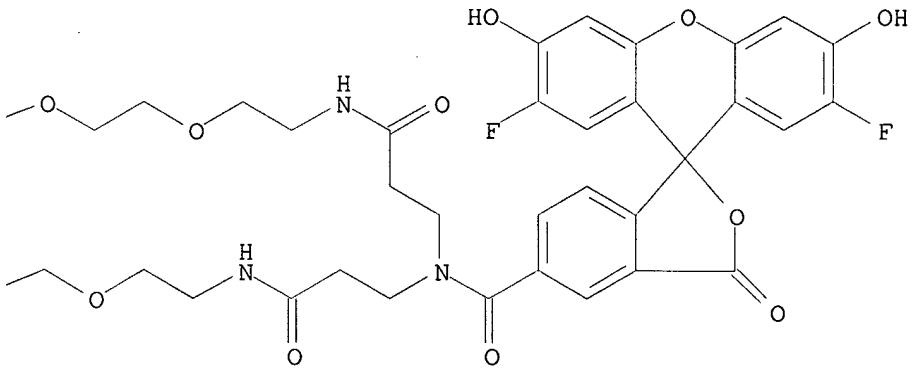
RN 377087-63-3 HCAPLUS
CN L-Arginine, 1,1'-[[[(2',7'-difluoro-3',6'-dihydroxy-3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthen]-5-yl)carbonyl]imino]bis[(1-oxo-3,1-propanediyl)imino-2,1-ethanediyloxy-2,1-ethanediyloxy(1-oxo-2,1-ethanediyl)]]bis[L-threonyl-L-lysyl-L-prolyl-L-prolyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

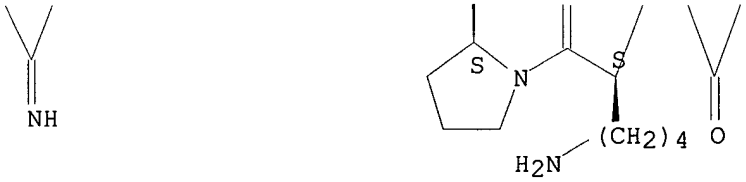
PAGE 1-A



PAGE 1-B



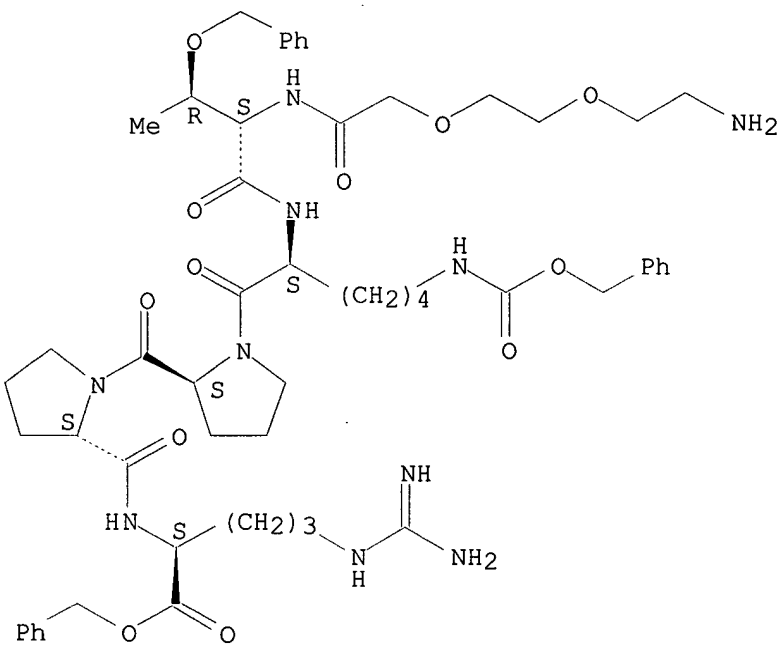
PAGE 2-A



IT **377087-55-3P 377087-56-4P 377087-66-6P 377087-67-7P 377087-68-8P 377087-75-7P 377087-80-4P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of peptide-contg. compds. and compns. for targeting endothelial cells expressing neuropilin-1 receptor for diagnosis and therapy)

RN 377087-55-3 HCAPLUS
CN L-Arginine, N-[[2-(2-aminoethoxy)ethoxy]acetyl]-O-(phenylmethyl)-L-threonyl-N6-[(phenylmethoxy)carbonyl]-L-lysyl-L-prolyl-L-prolyl-, phenylmethyl ester (9CI) (CA INDEX NAME)

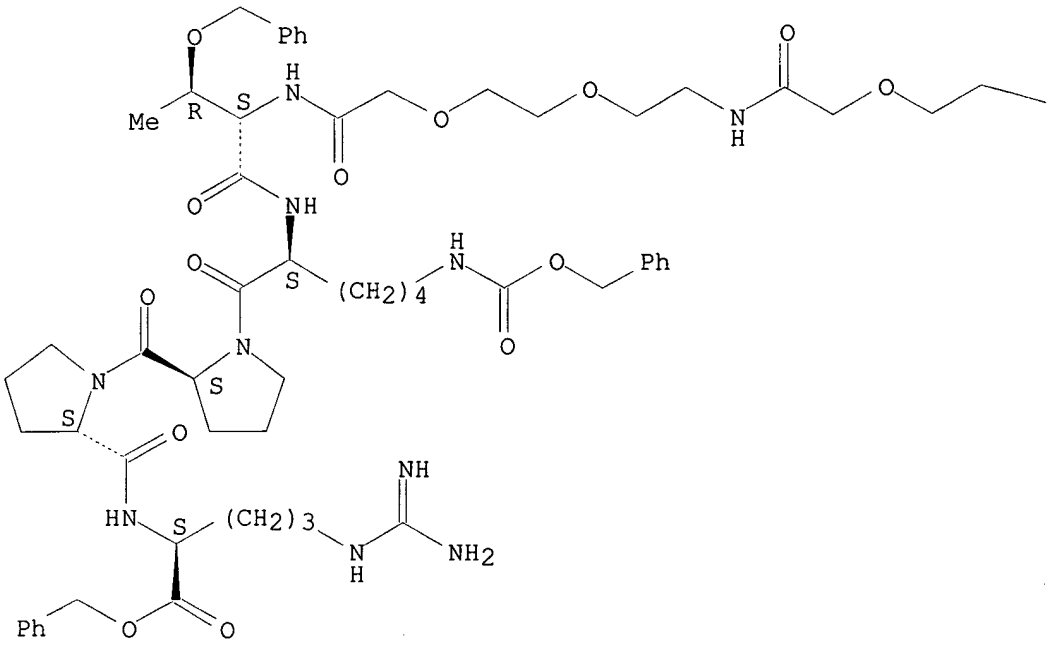
Absolute stereochemistry.



RN 377087-56-4 HCAPLUS
CN L-Arginine, N-(17-amino-1,10-dioxo-3,6,12,15-tetraoxa-9-azaheptadec-1-yl)-O-(phenylmethyl)-L-threonyl-N6-[(phenylmethoxy)carbonyl]-L-lysyl-L-prolyl-L-prolyl-, phenylmethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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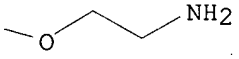
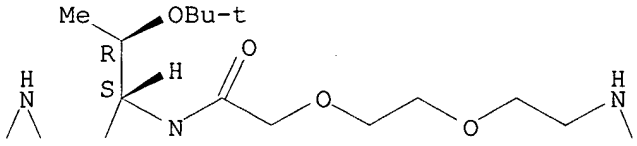


RN 377087-66-6 HCAPLUS
CN L-Ornithine, 1,1'-[[[(9H-fluoren-9-ylmethoxy)carbonyl]imino]bis[(1-oxo-3,1-propanediyl)imino-2,1-ethanediyloxy-2,1-ethanediyloxy(1-oxo-2,1-ethanediyl)]]bis[O-(1,1-dimethylethyl)-L-threonyl-N6-[(1,1-dimethylethoxy)carbonyl]-L-lysyl-L-prolyl-L-prolyl-N5-[[[(3,4-dihydro-2,2,5,7,8-pentamethyl-2H-1-benzopyran-6-yl)sulfonyl]amino]iminomethyl]-, bis(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

PAGE 1-B



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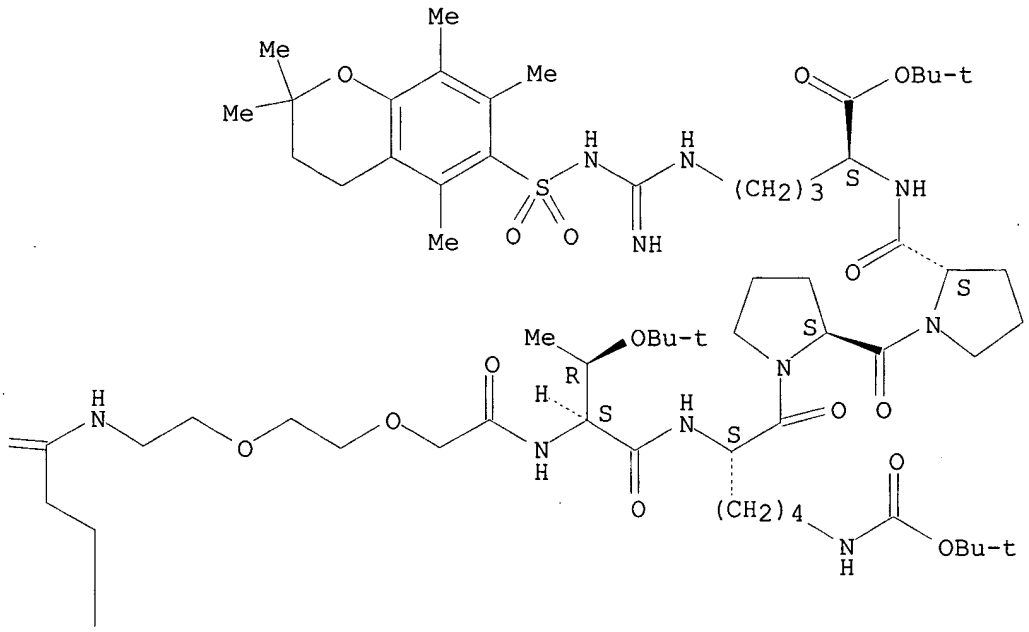

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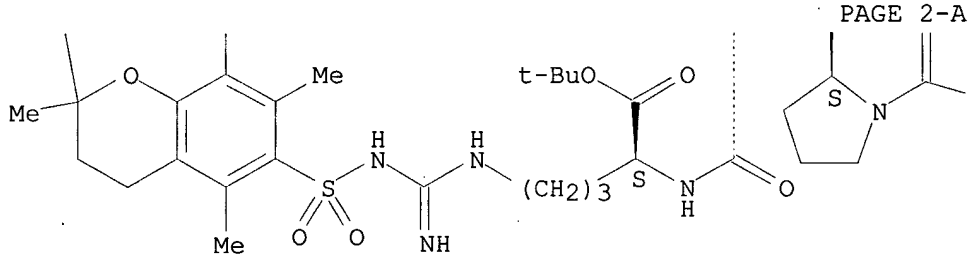

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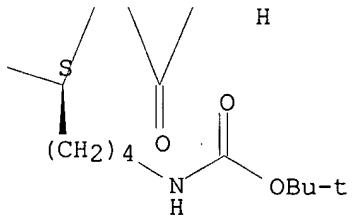

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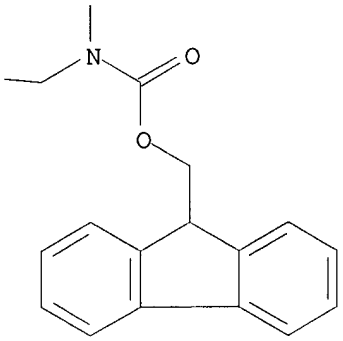
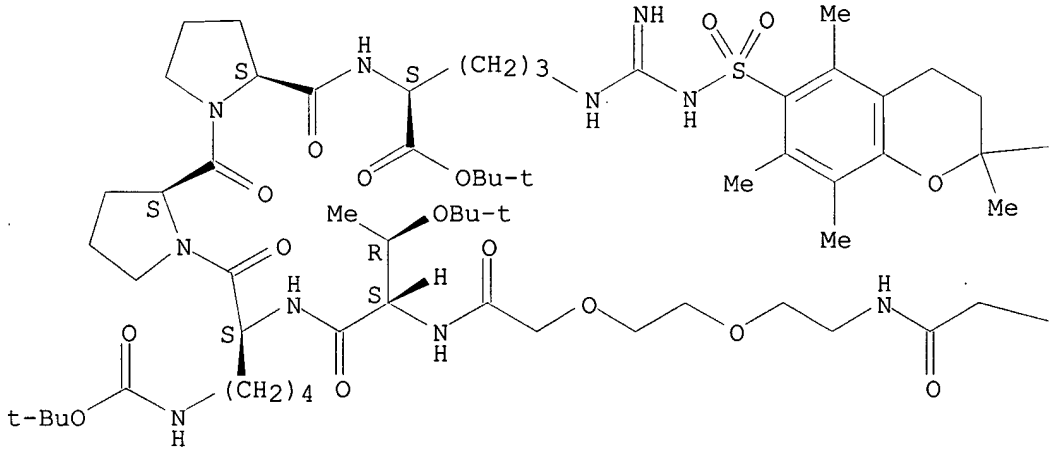


RN 377087-67-7 HCAPLUS
CN L-Ornithine, 1,1'-[iminobis[(1-oxo-3,1-propanediyl)imino-2,1-ethanediyloxy-2,1-ethanediyloxy(1-oxo-2,1-ethanediyl)]]bis[O-(1,1-dimethylethyl)-L-threonyl-N6-[(1,1-dimethylethoxy)carbonyl]-L-lysyl-L-prolyl-L-prolyl-N5-[[[(3,4-dihydro-2,2,5,7,8-pentamethyl-2H-1-benzopyran-6-yl)sulfonyl]amino]iminomethyl]-, bis(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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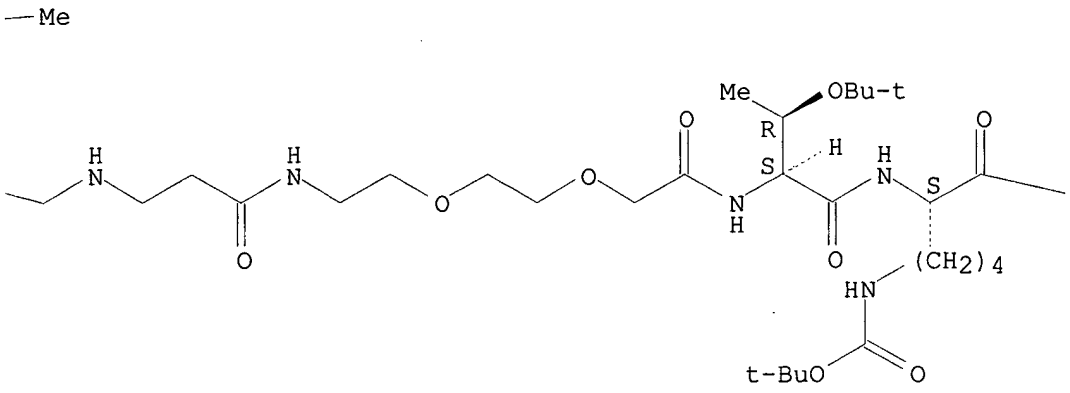

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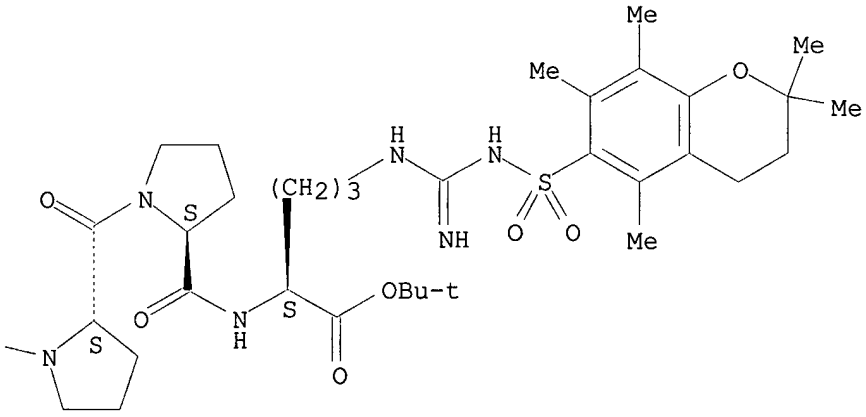
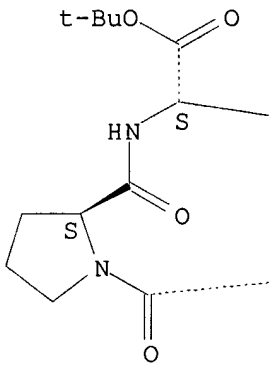
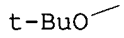


RN 377087-68-8 HCAPLUS
CN L-Ornithine, 1,1'-[[[(2',7'-difluoro-3',6'-dihydroxy-3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthen]-5-yl)carbonyl]imino]bis[(1-oxo-3,1-propanediyl)imino-2,1-ethanediyloxy-2,1-ethanediyloxy(1-oxo-2,1-ethanediyl)]]bis[O-(1,1-dimethylethyl)-L-threonyl-N6-[(1,1-dimethylethoxy)carbonyl]-L-lysyl-L-prolyl-L-prolyl-N5-[[[(3,4-dihydro-2,2,5,7,8-pentamethyl-2H-1-benzopyran-6-yl)sulfonyl]amino]iminomethyl]-, bis(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A





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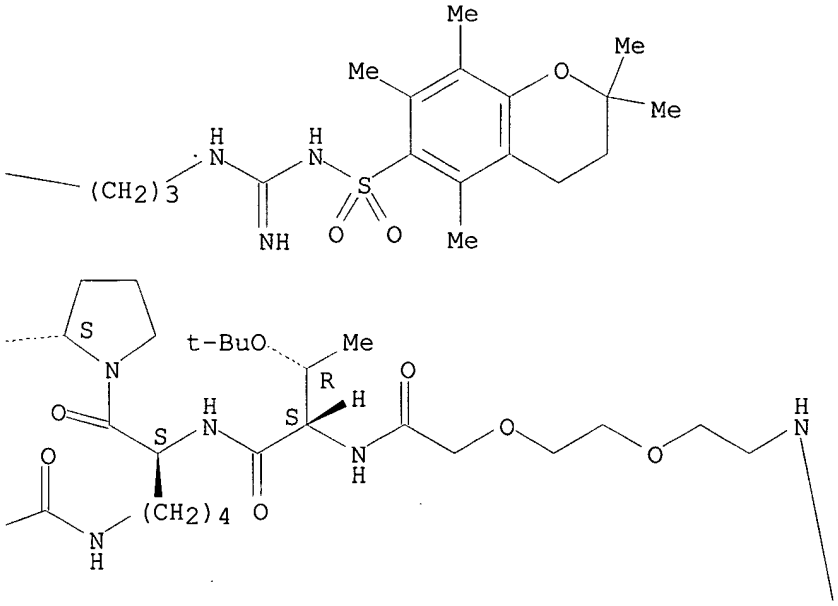

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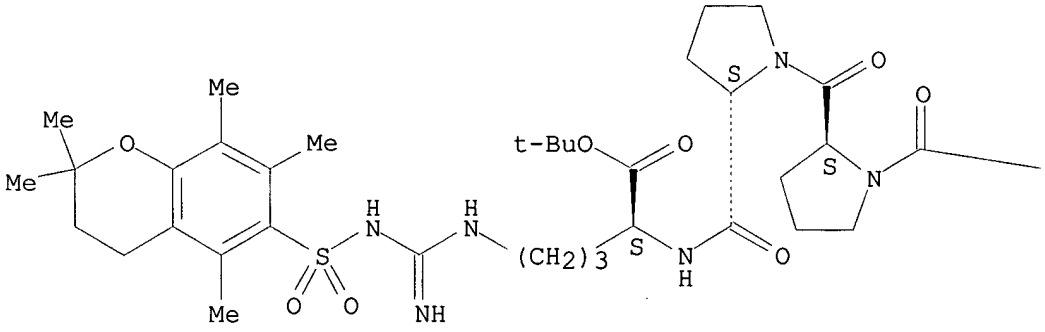
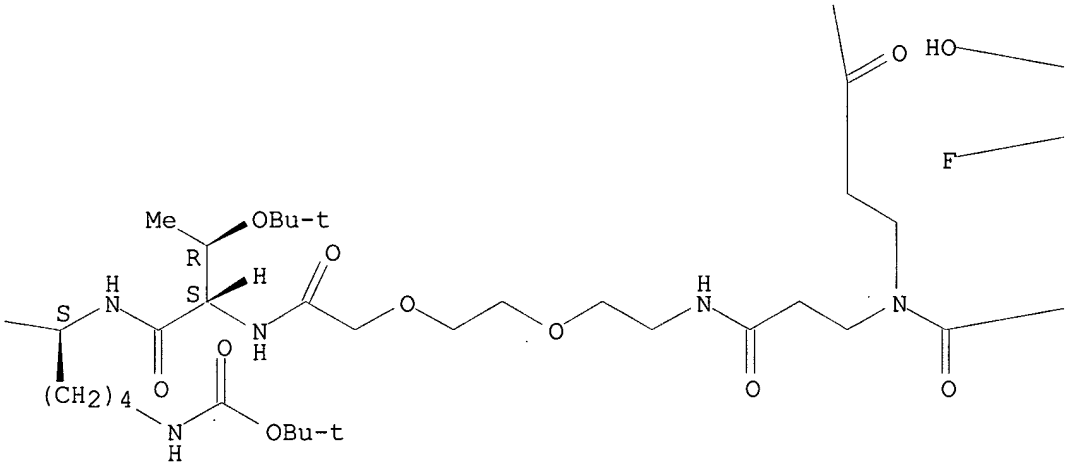
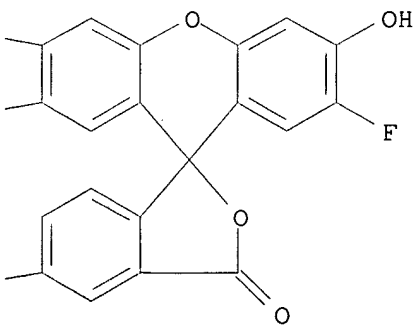


PAGE 2-B



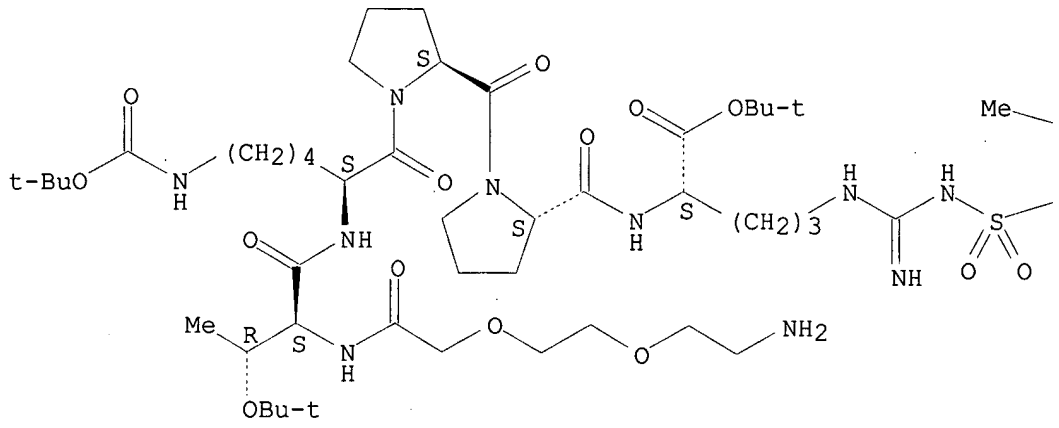
PAGE 2-C



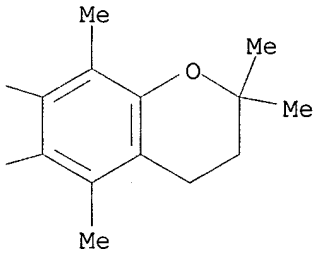
RN 377087-75-7 HCAPLUS
CN L-Ornithine, N-[[2-(2-aminoethoxy)ethoxy]acetyl]-O-(1,1-dimethylethyl)-L-threonyl-N6-[(1,1-dimethylethoxy)carbonyl]-L-lysyl-L-prolyl-L-prolyl-N5-[[[(3,4-dihydro-2,2,5,7,8-pentamethyl-2H-1-benzopyran-6-yl)sulfonyl]amino]iminomethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



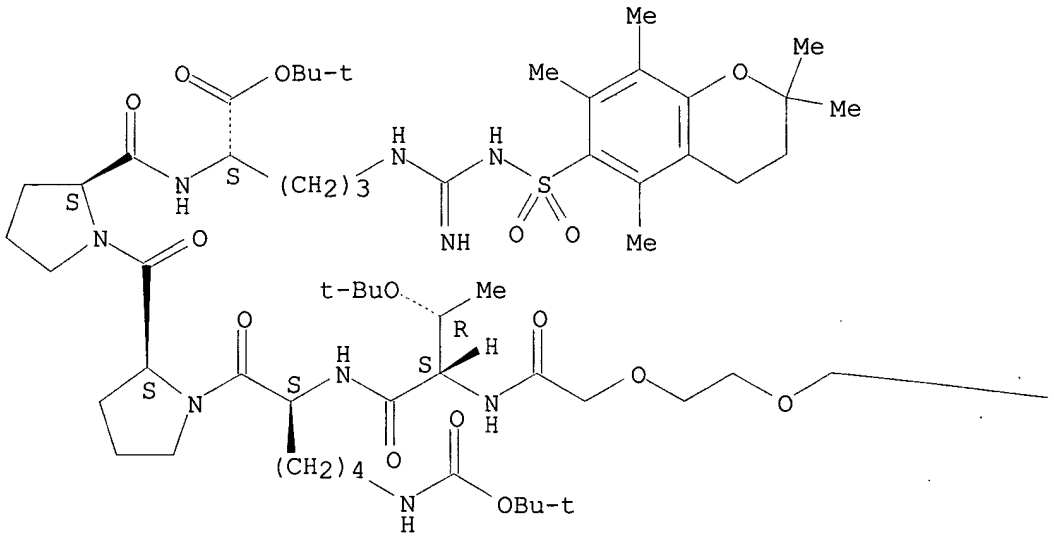
PAGE 1-B



RN 377087-80-4 HCAPLUS
CN L-Ornithine, O-(1,1-dimethylethyl)-N-[12-(9H-fluoren-9-yl)-1,10-dioxo-3,6,11-trioxa-9-azadodec-1-yl]-L-threonyl-N6-[(1,1-dimethylethoxy)carbonyl]-L-lysyl-L-prolyl-L-prolyl-N5-[[[(3,4-dihydro-2,2,5,7,8-pentamethyl-2H-1-benzopyran-6-yl)sulfonyl]amino]iminomethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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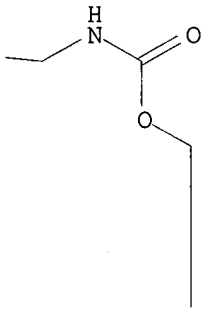
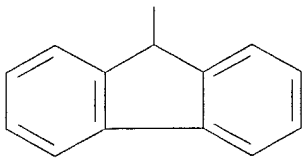


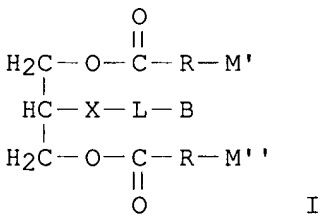


L6 ANSWER 8 OF 33 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2001:731185 HCAPLUS
DOCUMENT NUMBER: 135:269295
TITLE: Labeled, immobilizable triacylglycerol analogs for lipase assays
INVENTOR(S): Price-Jones, Molly Jean; James, David Martin; Fowler, Anne; Poulsen, Fritz; Tornquist, Hans; Hawes, Calvin Richard
PATENT ASSIGNEE(S): Amersham Pharmacia Biotech UK Limited, UK
SOURCE: PCT Int. Appl., 28 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001073442	A1	20011004	WO 2001-GB1350	20010323

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: GB 2000-7465 A 20000329
OTHER SOURCE(S): MARPAT 135:269295
GI



I

AB Disclosed is a triacylglycerol analog (I; L = **linker**; B = binding agent; X = atom or group suitable for attaching L to the glycerol chain; R = C8-30-straight chain satd. or unsatd. alkyl group substituted with M' or M" wherein at least one of M' and/or M" is a detectable label). The compd. can be used as a lipase substrate in a solid phase-based assay

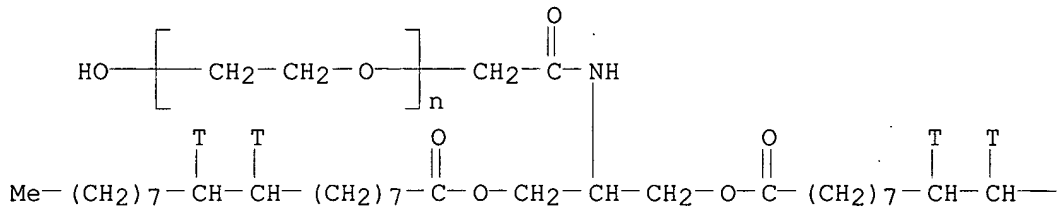
system, such as a scintillation proximity assay, to detect lipase enzyme activity. Thus, I (L = PEG, B = biotin, X = NH, R = tritium-labeled heptadecyl, M,M' = tritium) was synthesized, immobilized on streptavidin-coated YSi beads, and used in scintillation proximity assays of various lipases.

IT **364039-27-0DP**, biotin **conjugates**
RL: ARG (Analytical reagent use); SPN (Synthetic preparation); ANST (Analytical study); PREP (Preparation); USES (Uses)
(labeled, immobilizable triacylglycerol analogs for lipase assays)

RN 364039-27-0 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), .alpha.-[2-oxo-2-[[2-[(1-oxooctadecyl-9,10-t2)oxy]-1-[[(1-oxooctadecyl-9,10-t2)oxy]methyl]ethyl]amino]ethyl]-.omega.-hydroxy- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B

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REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 9 OF 33 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2001:481718 HCAPLUS
DOCUMENT NUMBER: 135:227187
TITLE: quantitative studies of binding between synthetic **galactosyl** ceramide analogs and HIV-1 Gp120 at planar membrane surfaces
AUTHOR(S): Gu, Yingmei; LaBell, Rachel; O'Brien, David F.; Saavedra, S. Scott
CORPORATE SOURCE: Dep. of Chem., Univ. of Arizona, Tucson, AZ, 85721-0041, USA
SOURCE: Angewandte Chemie, International Edition (2001), 40(12), 2320-2322
CODEN: ACIEF5; ISSN: 1433-7851
PUBLISHER: Wiley-VCH Verlag GmbH
DOCUMENT TYPE: Journal
LANGUAGE: English

AB We have prepd. synthetic GalCer analogs that bind to the HIV-1 viral envelope glycoprotein rgp120 cooperatively when incorporated uniformly into a planar fluid membrane at 5 mol%. A crit. **spacer** arm

length necessary to promote efficient binding has been identified. These results should aid efforts to design anti-HIV-1 agents based on membrane-tethered, carbohydrate-based receptors for rgp120.

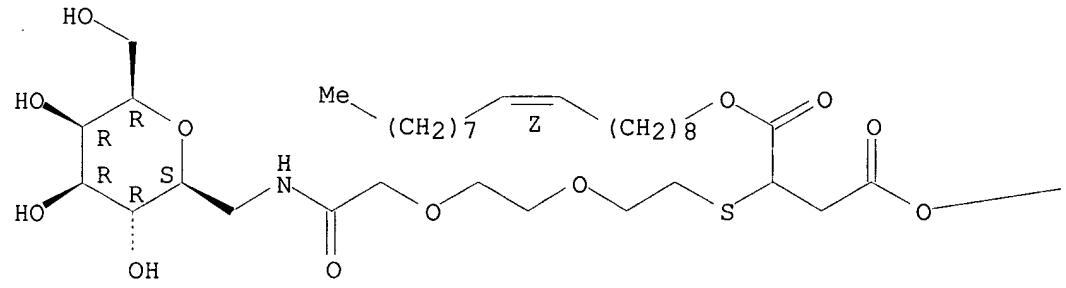
IT **359442-78-7P 359442-79-8P 359442-80-1P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(quant. studies of binding between synthetic **galactosyl** ceramide analogs and HIV-1 Gp120 at planar membrane surfaces)

RN 359442-78-7 HCAPLUS

CN L-glycero-L-galacto-Heptitol, 2,6-anhydro-7-deoxy-7-[[(22Z)-10-[[[(9Z)-9-octadecenyl]oxy]carbonyl]-1,12-dioxo-3,6,13-trioxa-9-thiahentriacont-22-en-1-yl]amino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

PAGE 1-A



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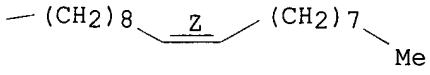
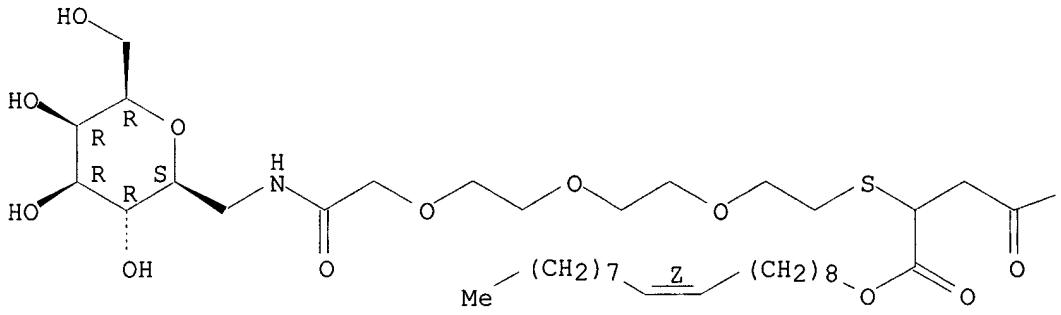


RN 359442-79-8 HCAPLUS

CN L-glycero-L-galacto-Heptitol, 2,6-anhydro-7-deoxy-7-[[(25Z)-13-[[[(9Z)-9-octadecenyl]oxy]carbonyl]-1,15-dioxo-3,6,9,16-tetraoxa-12-thiatetratriacont-25-en-1-yl]amino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

PAGE 1-A



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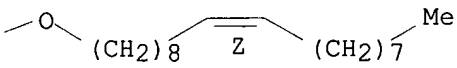
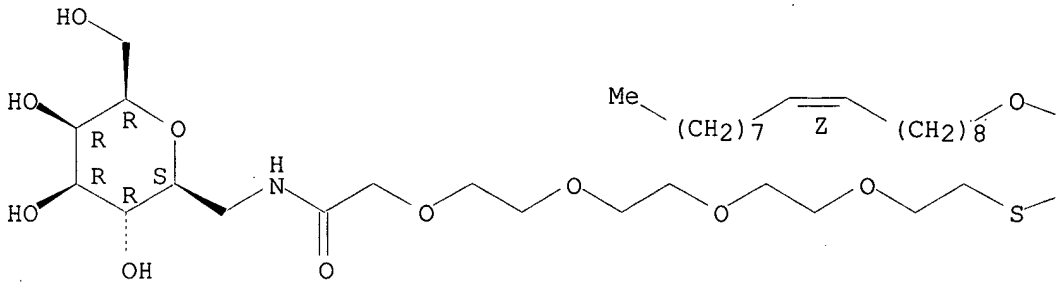
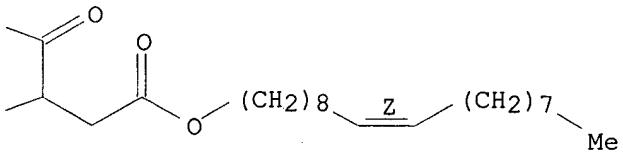


RN 359442-80-1 HCAPLUS
CN L-glycero-L-galacto-Heptitol, 2,6-anhydro-7-deoxy-7-[[(28Z)-16-[[[(9Z)-9-octadecenyl]oxy]carbonyl]-1,18-dioxo-3,6,9,12,19-pentaoxa-15-thiaheptatriacont-28-en-1-yl]amino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

PAGE 1-A





REFERENCE COUNT: 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 10 OF 33 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2001:468203 HCAPLUS
DOCUMENT NUMBER: 135:66201
TITLE: **Conjugates** targeted to the interleukin-2 receptor
INVENTOR(S): Prakash, Ramesh K.; Clemens, Christopher M.
PATENT ASSIGNEE(S): Watson Laboratories, Inc., USA
SOURCE: U.S., 22 pp., Cont.-in-part of U.S. Ser. No. 914,042, abandoned.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6251866	B1	20010626	US 1998-128572	19980804
WO 2000007543	A2	20000217	WO 1999-US17648	19990804
WO 2000007543	A3	20000511		
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 9953926	A1	20000228	AU 1999-53926	19990804
EP 1100543	A2	20010523	EP 1999-939680	19990804
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
BR 9912749	A	20010731	BR 1999-12749	19990804

PRIORITY APPLN. INFO.:
US 1997-914042 B2 19970805
US 1998-128572 A 19980804
WO 1999-US17648 W 19990804

AB A compn. for intracellular delivery of a chem. agent into an interleukin-2-receptor-bearing cell, e.g. an activated T cell, includes a chem. agent and at least one copy of an interleukin-2-receptor-binding and endocytosis-inducing ligand coupled to a water sol. polymer. The ligand binds to a receptor on the interleukin-2-receptor-bearing cell and elicits endocytosis of the compn. The compn. also preferably includes a **spacer** for coupling the chem. agent and the ligand to the polymer.

Chem. agents can include cytotoxins, transforming nucleic acids, gene regulators, labels, antigens, drugs, and the like. A preferred water sol. polymer is a polyalkylene oxide, such as polyethylene glycol and polyethylene oxide, and activated derivs. thereof. The compn. can further comprise a carrier such as another water sol. polymer, liposome, or particulate. Methods of using these compns. for delivering a chem. agent in vivo or in vitro are also disclosed. A method of detecting a disease, such as T-cell lymphocytic leukemia, T-cell acute lymphoblastic leukemia, peripheral T-cell lymphoma, Hodgkin's disease, or non-Hodgkin's lymphoma, assocd. with elevated levels of sol. IL-2 receptor is also disclosed.

IT **345904-19-0DP**, reaction product with adriamycin
345904-20-3DP, reaction product with adriamycin
345904-21-4DP, reaction product with adriamycin
345904-22-5DP, reaction product with adriamycin
345904-23-6DP, reaction product with adriamycin
345904-24-7DP, reaction product with adriamycin
345904-25-8DP, reaction product with adriamycin
345904-26-9DP, reaction product with adriamycin
345904-27-0DP, reaction product with adriamycin
345904-28-1DP, reaction product with adriamycin
345904-29-2DP, reaction product with adriamycin
345904-30-5DP, reaction product with adriamycin
345904-31-6DP, reaction product with adriamycin
345904-32-7DP, reaction product with adriamycin
345904-33-8DP, reaction product with adriamycin
345904-34-9DP, reaction product with adriamycin
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PNU (Preparation, unclassified); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(peptide **conjugates** targeted to the interleukin-2 receptor)

RN 345904-19-0 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxy-, monoether with hydroxyacetylglycyl-L-leucyl-L-.alpha.-glutamyl-L-arginyl-L-isoleucyl-L-leucyl-L-leucylglycyl-L-phenylalanyl-L-leucylglycine (9CI) (CA INDEX NAME)

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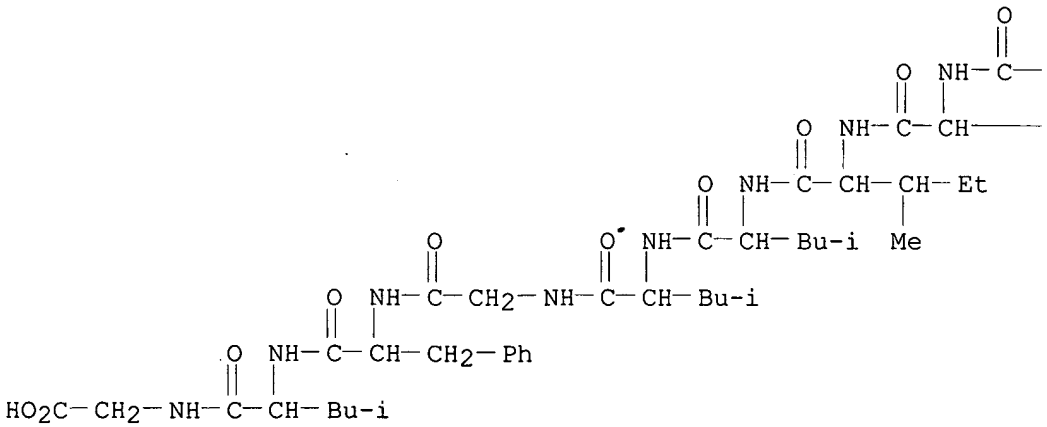

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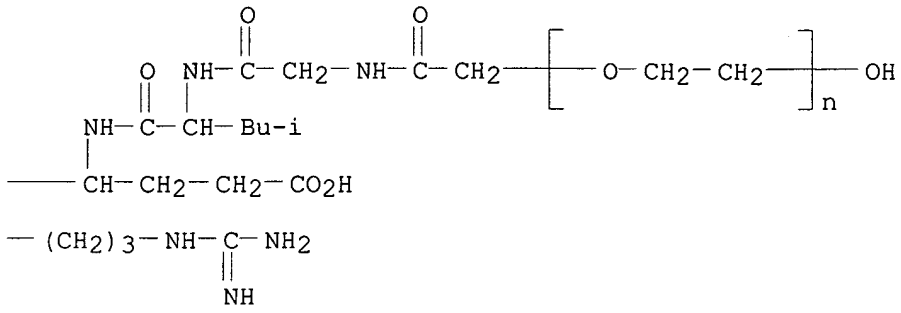

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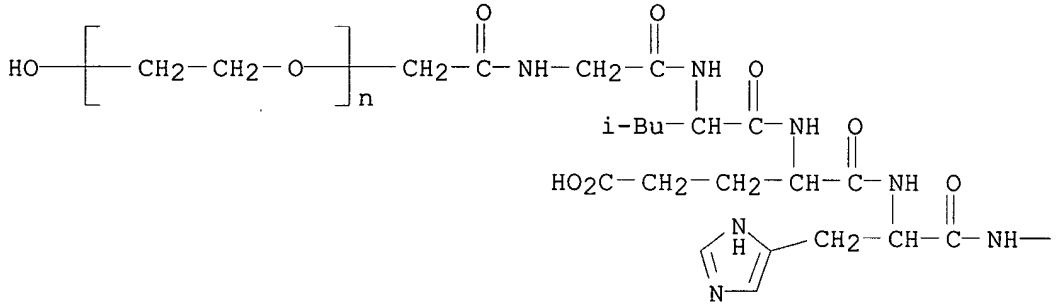
PAGE 1-A



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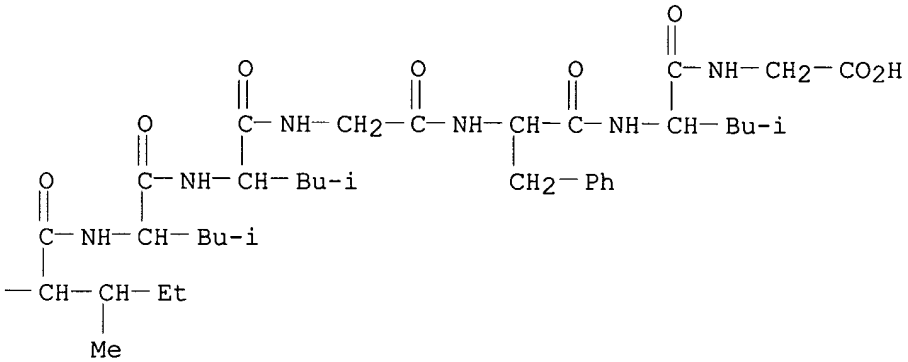

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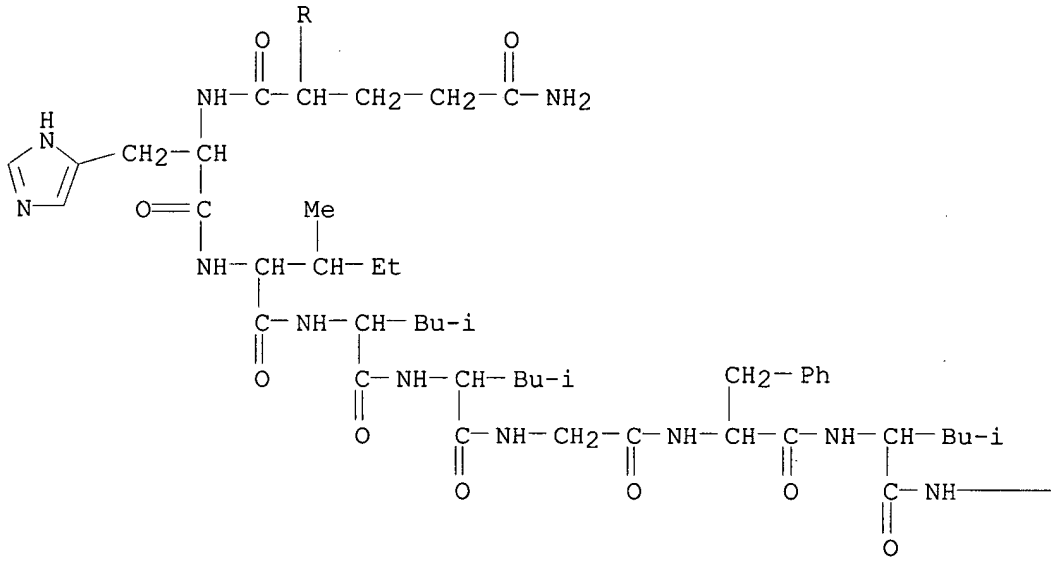
PAGE 1-A



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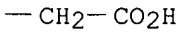

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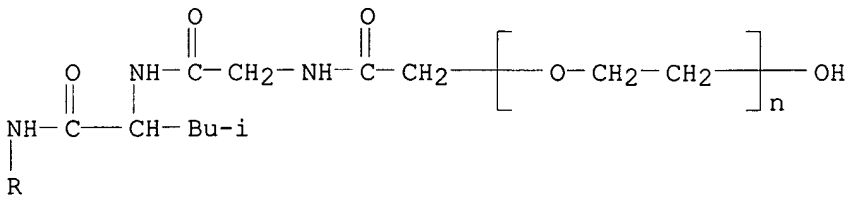

RN 345904-22-5 HCAPLUS
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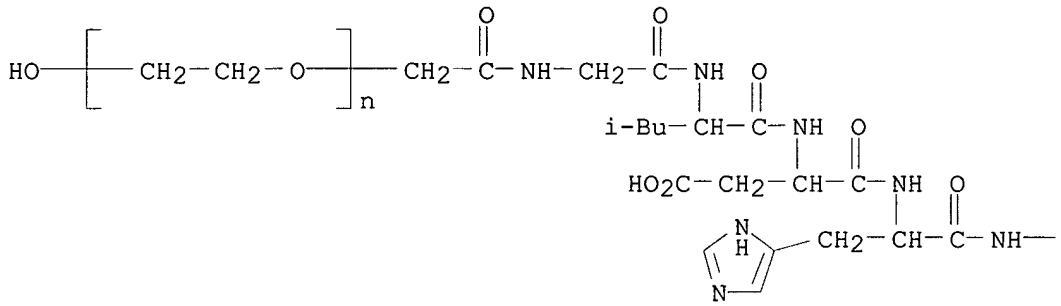
PAGE 1-A



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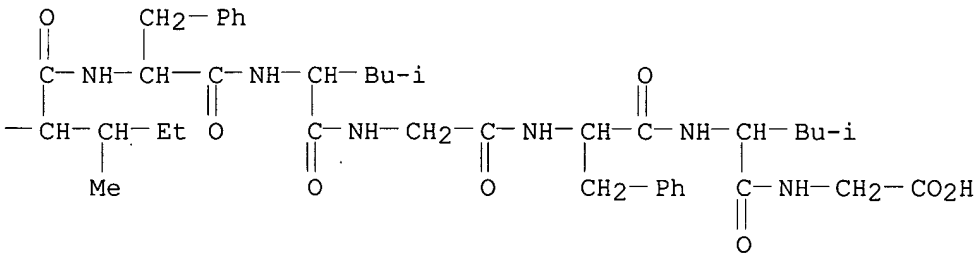

RN 345904-23-6 HCAPLUS
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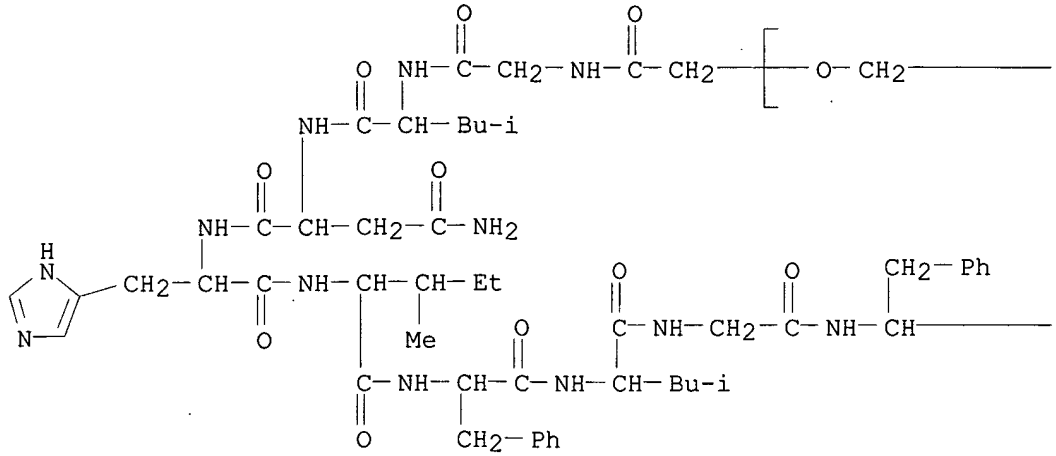
PAGE 1-A



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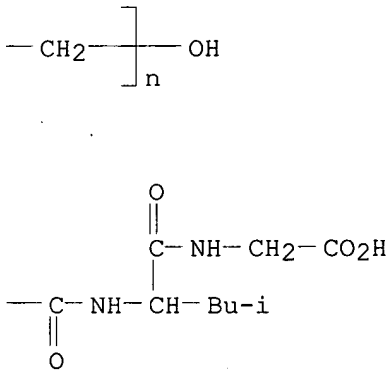

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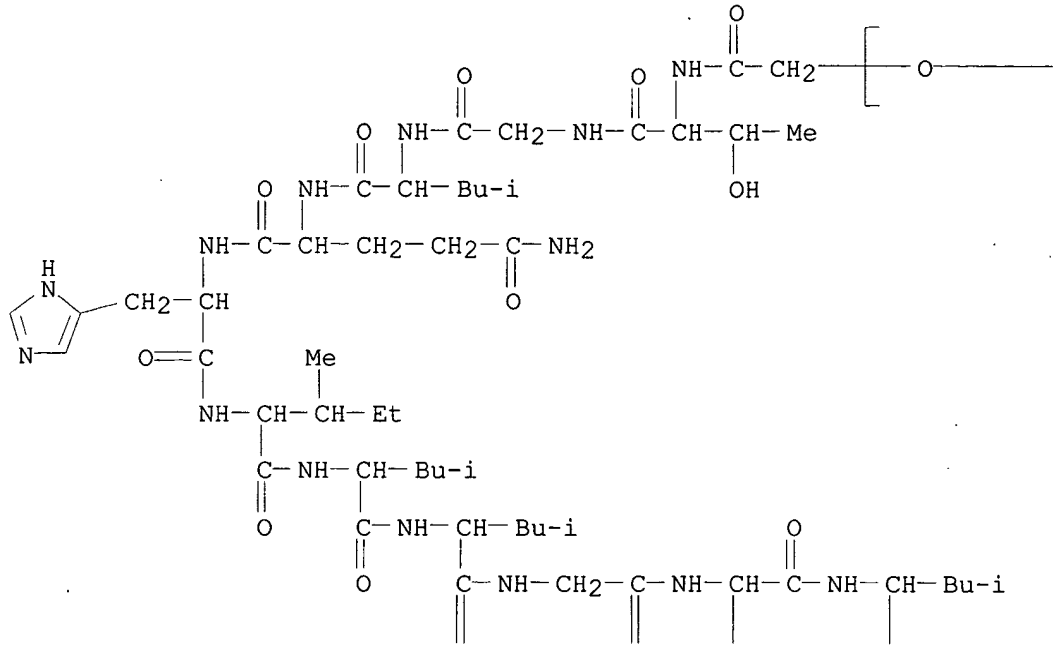
PAGE 1-A



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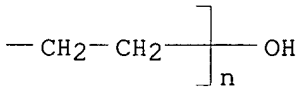

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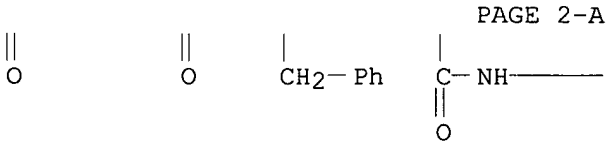

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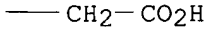

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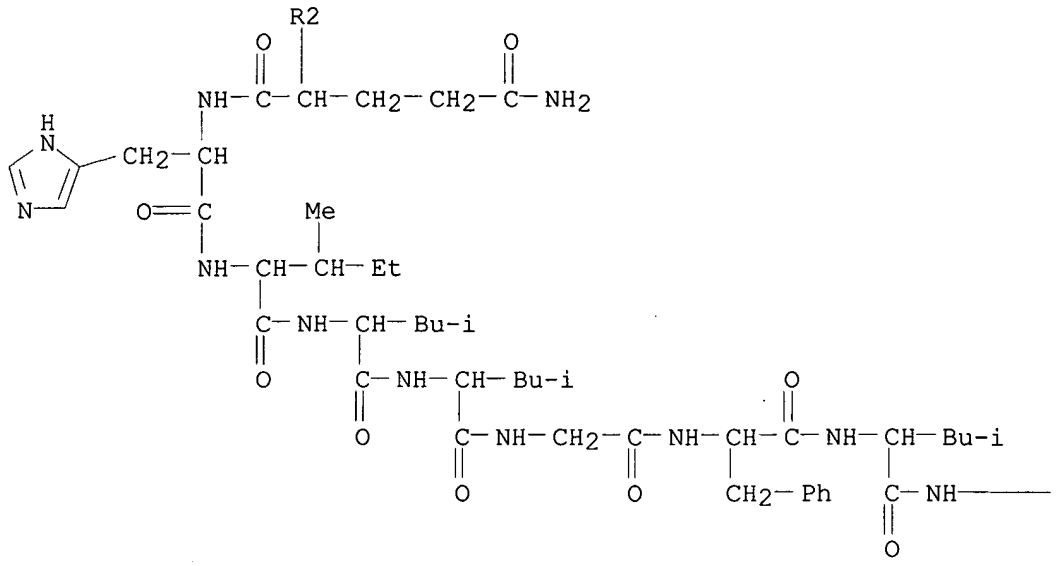
PAGE 1-A



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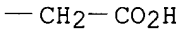

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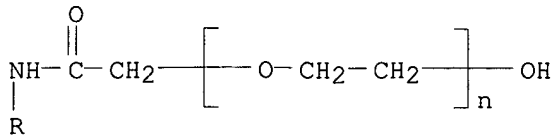

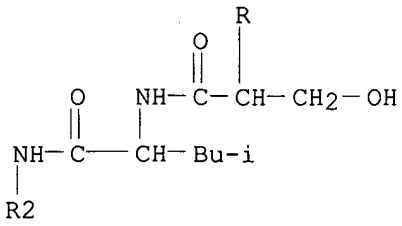

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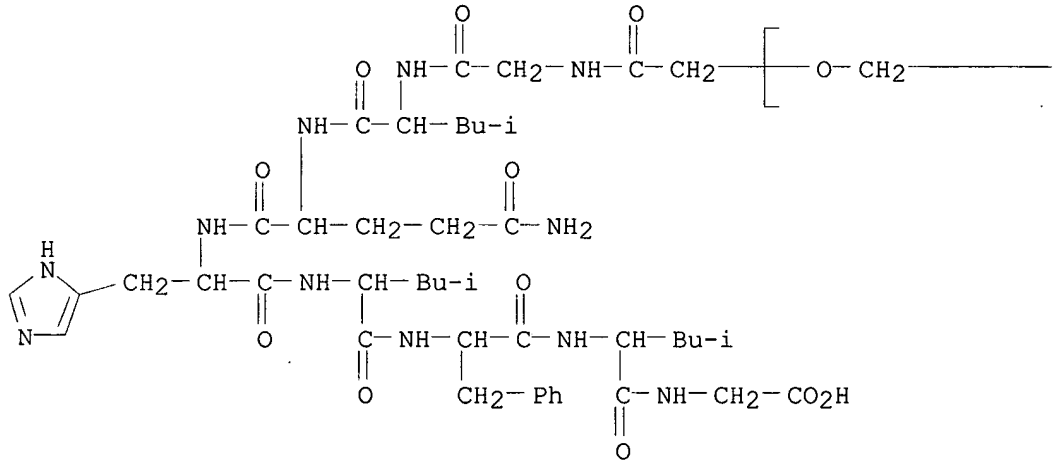
PAGE 1-A



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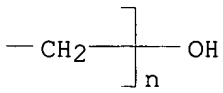

RN 345904-27-0 HCAPLUS
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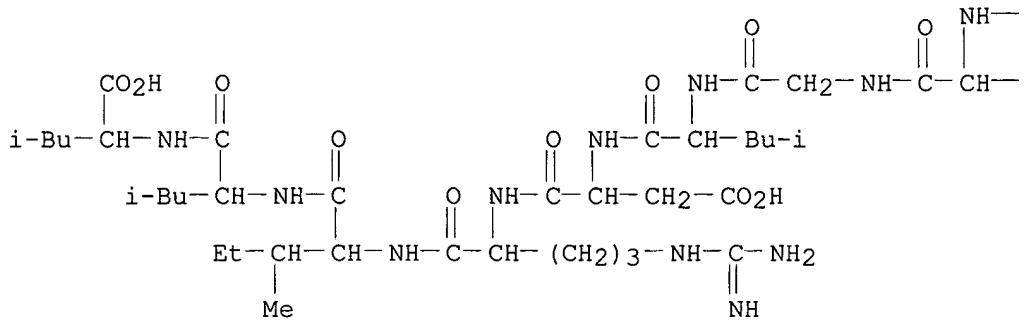
PAGE 1-A



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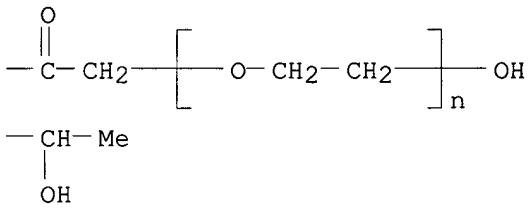

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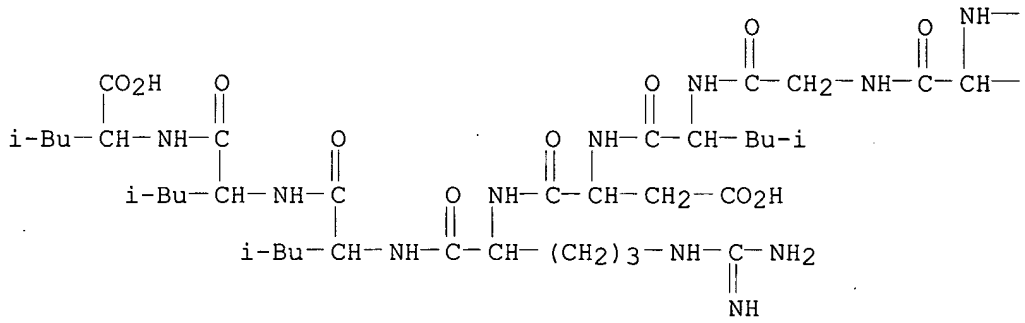
PAGE 1-A



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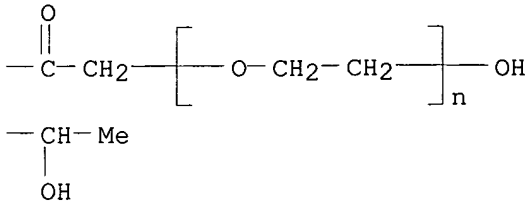

RN 345904-29-2 HCAPLUS
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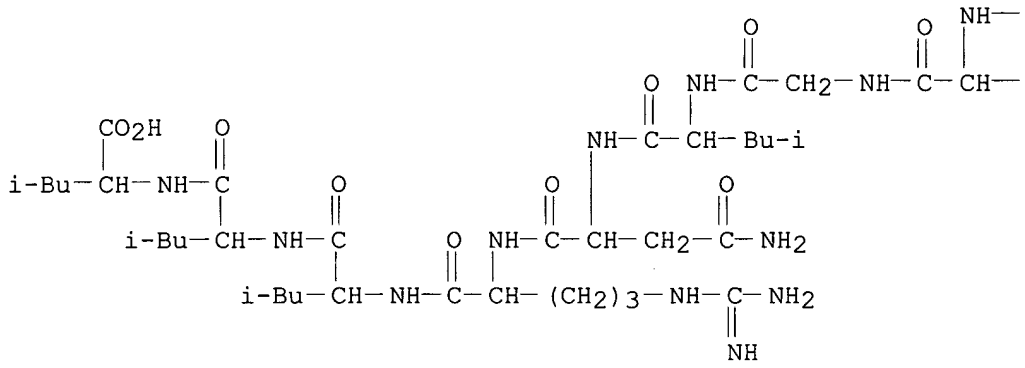
PAGE 1-A



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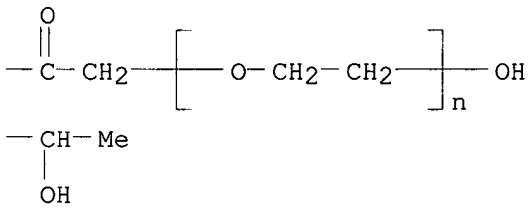

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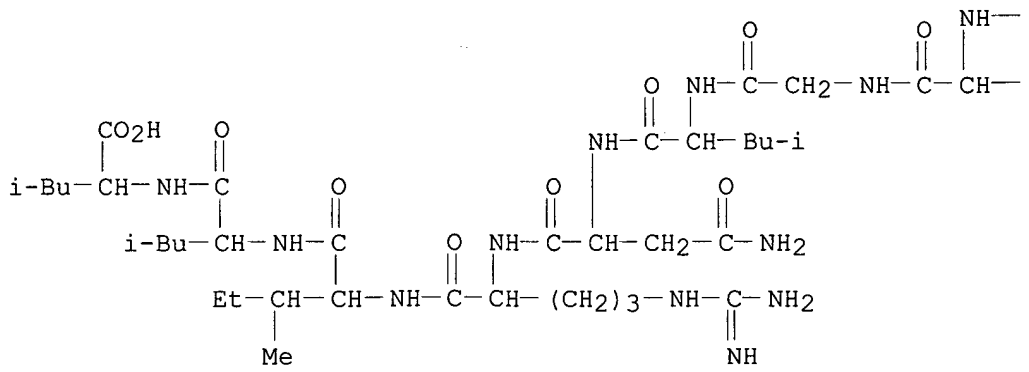
PAGE 1-A



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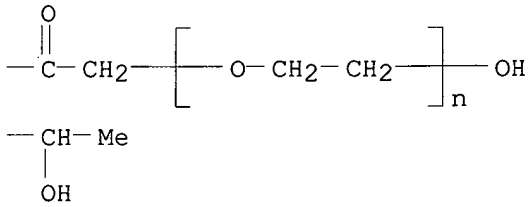

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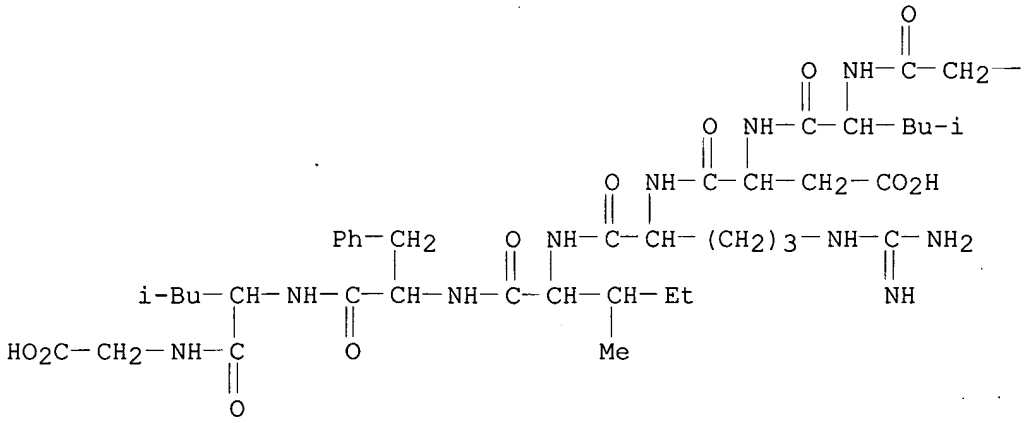
PAGE 1-A



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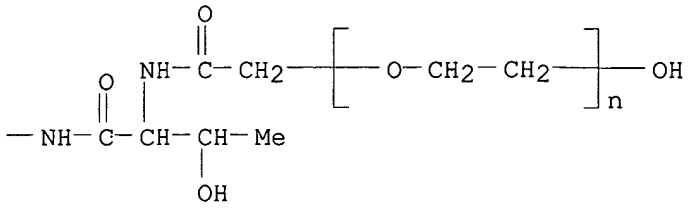

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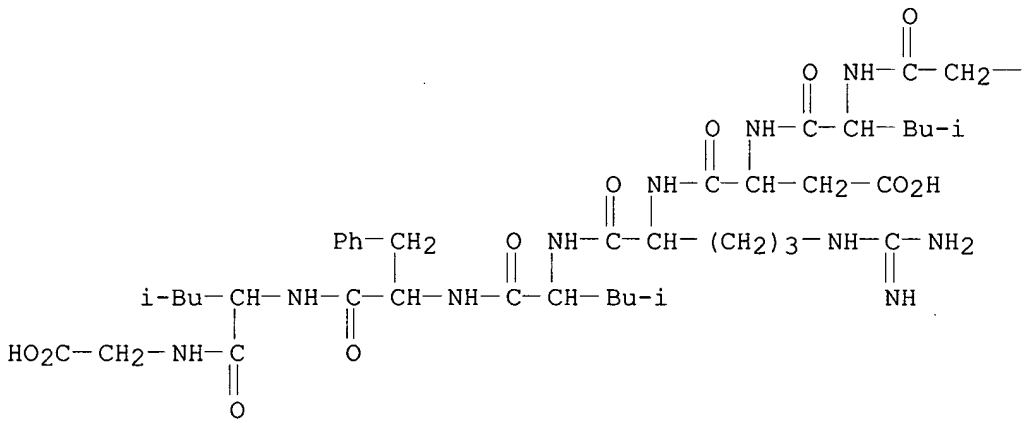
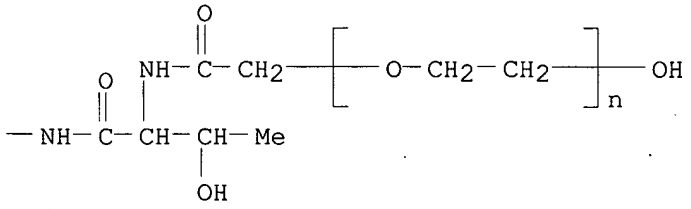
PAGE 1-A

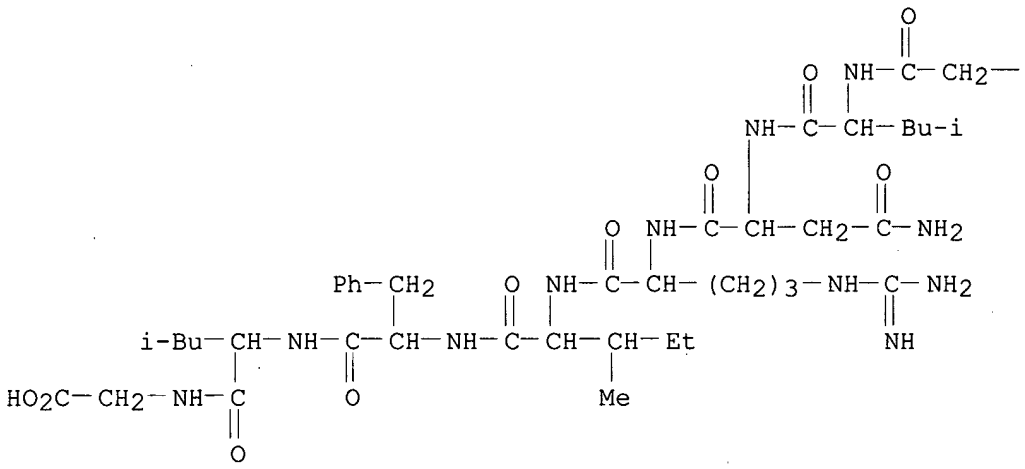


PAGE 1-B

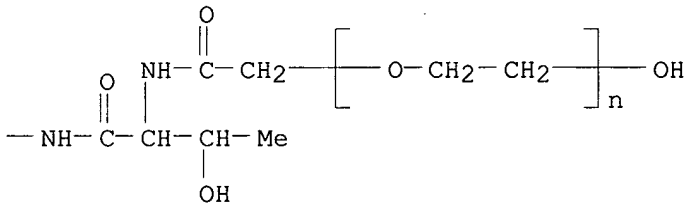


RN 345904-33-8 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxy-, 1-ether with hydroxyacetyl-L-threonylglycyl-L-leucyl-L-asparaginyl-L-arginyl-L-isoleucyl-L-phenylalanyl-L-leucylglycine (9CI) (CA INDEX NAME)

PAGE 1-A

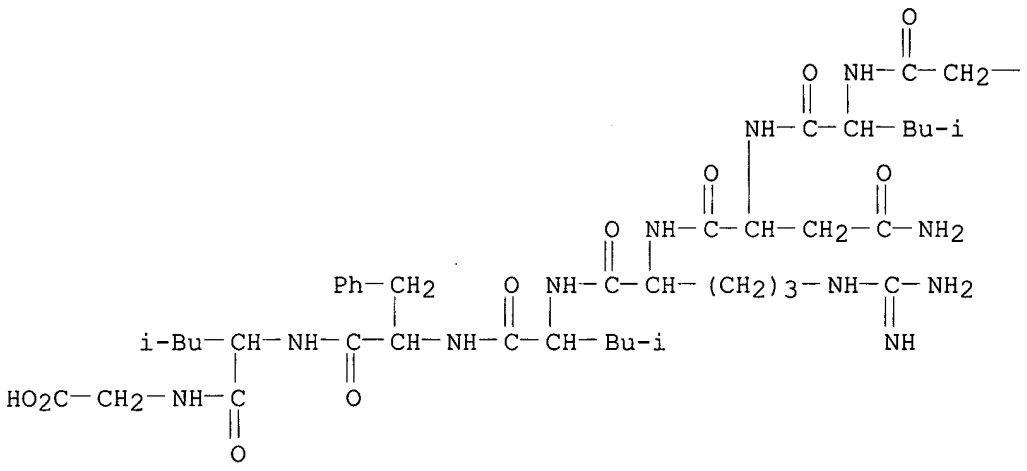


PAGE 1-B



RN 345904-34-9 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxy-, 1-ether with hydroxyacetyl-L-threonylglycyl-L-leucyl-L-asparaginyl-L-arginyl-L-leucyl-L-phenylalanyl-L-leucylglycine (9CI) (CA INDEX NAME)

PAGE 1-A



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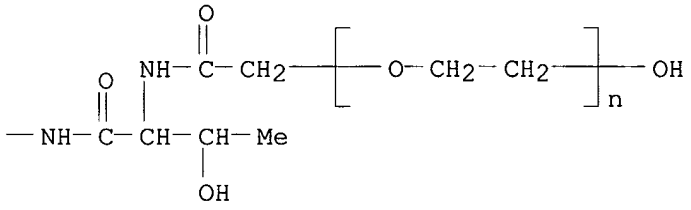
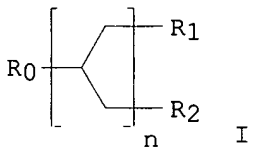


REFERENCE COUNT: 72 THERE ARE 72 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 11 OF 33 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2001:168055 HCAPLUS
DOCUMENT NUMBER: 134:208364
TITLE: Amphipathic compound having dendritic structure
INVENTOR(S): Tsuchida, Eishun; Takeoka, Shinji; Sou, Keitaro; Ohkawa, Haruki
PATENT ASSIGNEE(S): Japan Science and Technology Corporation, Japan
SOURCE: PCT Int. Appl., 60 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001016211	A1	20010308	WO 2000-JP5702	20000824
W: US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				

JP 2001064383 A2 20010313 JP 1999-245731 19990831
JP 3181276 B2 20010703
PRIORITY APPLN. INFO.: JP 1999-245731 A 19990831
GI



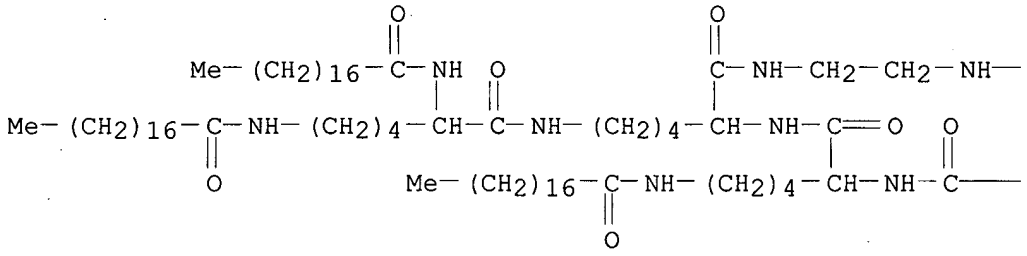
I

AB An amphipathic compd. having a dendritic structure represented by structural formula (I). In the I, R0 is a hydrophilic group (e.g., oligosaccharides); R1 and R2 each independently is a hydrophobic group; and n is an integer of 1 to 4. This amphipathic compd. can take advantage of the intermol. interaction to stably fix a water-sol. polymer on the surface and can hold the same while retaining its intact function. Thus, a low generation dendritic compd. was prepd. by using lysine as a **spacer**, polyethylene oxide as the hydrophilic moiety former, and palmitic acid as the hydrophobic moiety former.

IT **329008-63-1DP**, reaction products with myoglobin
329008-63-1P
RL: IMF (Industrial manufacture); PREP (Preparation)
(amphipathic compd. having dendritic structure)

RN 329008-63-1 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), .alpha.-(carboxymethyl)-.omega.-hydroxy-, ether with N2,N6-bis[N2,N6-bis(1-oxooctadecyl)-L-lysyl]-N-(2-hydroxyethyl)-L-lysinamide (9CI) (CA INDEX NAME)

PAGE 1-A



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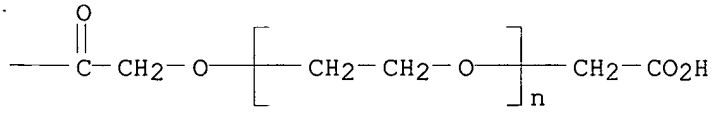
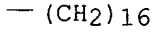
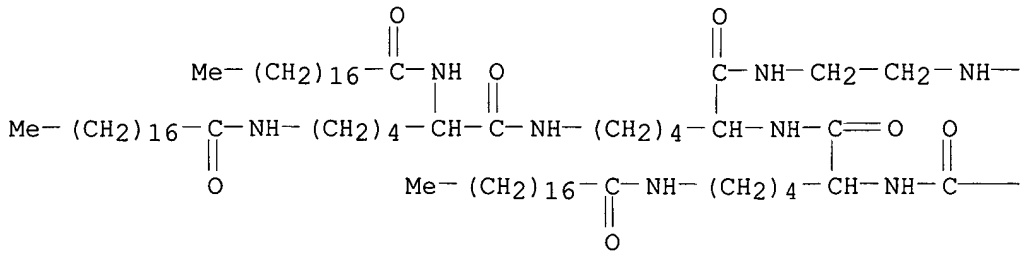




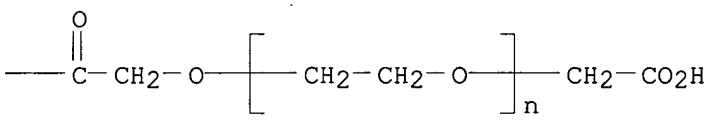
RN 329008-63-1 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), .alpha.-(carboxymethyl)-.omega.-hydroxy-, ether with N2,N6-bis[N2,N6-bis(1-oxooctadecyl)-L-lysyl]-N-(2-hydroxyethyl)-L-

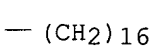
lysinamide (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B





REFERENCE COUNT: 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 12 OF 33 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2000:700678 HCAPLUS
DOCUMENT NUMBER: 134:21375
TITLE: Lectin-mediated drug targeting: selection of valency, sugar type (Gal/Lac), and **spacer** length for cluster glycosides as parameters to distinguish ligand binding to C-type asialoglycoprotein receptors and galectins
AUTHOR(S): Andre, Sabine; Frisch, Benoit; Kaltner, Herbert; Desouza, Debora Lima; Schuber, Francis; Gabius, Hans-J.
CORPORATE SOURCE: Institut fur Physiologische Chemie, Tierarztliche Fakultat, Ludwig-Maximilians-Universitat, Munchen, D-80539, Germany
SOURCE: Pharmaceutical Research (2000), 17(8), 985-990
CODEN: PHREEB; ISSN: 0724-8741
PUBLISHER: Kluwer Academic/Plenum Publishers
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Common oligosaccharides of cellular glycoconjugates are ligands for more than one type of endogenous lectin. Overlapping specificities to .beta.-**galactosides** of C-type lectins and galectins can reduce target selectivity of carbohydrate-ligand-dependent drug targeting. The purpose of this study is to explore distinct features of ligand presentation and structure for design of cluster glycosides to distinguish between asialoglycoprotein-specific (C-type) lectins and galectins. Extent of binding of labeled sugar receptors to two types of matrix-immobilized (neo)glycoproteins and to cells was evaluated in the absence and presence of competitive inhibitors. This panel comprised synthetic mono-, bi-, and trivalent glycosides with two **spacer** lengths and

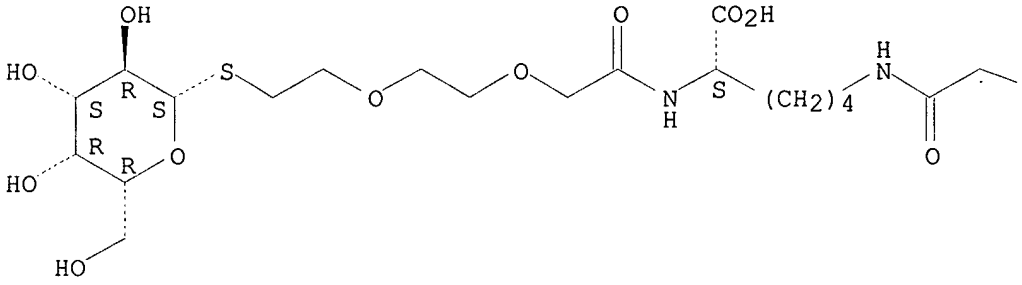
galactose or lactose as ligand part. In contrast to C-type lectins of hepatocytes and macrophages, bi- and trivalent glycosides do not yield a notable glycoside cluster effect for galectins-1 and -3. Also, these Ca2+-independent **galactoside**-binding proteins prefer to home in on lactose-bearing glycosides relative to **galactose** as ligand, while **spacer** length requirements were rather similar. Trivalent cluster glycosides with Gal/GalNAc as ligand markedly distinguish between C-type lectins and galectins. Undesired side reactivities to galectins for C-type lectin drug delivery will thus be minimal.

IT **170304-71-9P 170304-72-0P 310450-29-4P**
310450-33-0P
RL: BPR (Biological process); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)
(lectin-mediated drug targeting: selection of valency, sugar type, and **spacer** length for cluster glycosides as parameters to distinguish ligand binding to C-type asialoglycoprotein receptors and galectins)

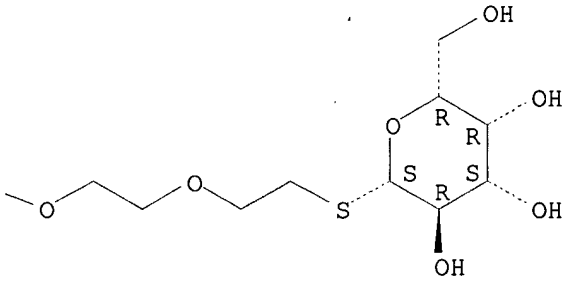
RN 170304-71-9 HCAPLUS
CN L-Lysine, N2,N6-bis[[2-[2-(.beta.-D-galactopyranosylthio)ethoxy]ethoxy]acetyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

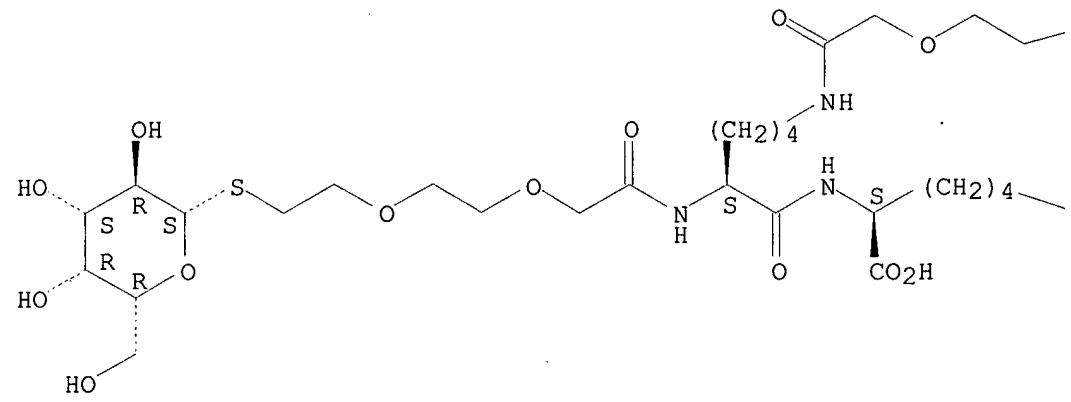


RN 170304-72-0 HCAPLUS
CN L-Lysine, N2,N6-bis[[2-[2-(.beta.-D-galactopyranosylthio)ethoxy]ethoxy]ace

tyl]-L-lysyl-N6-[[2-[2-(.beta.-D-galactopyranosylthio)ethoxy]ethoxy]acetyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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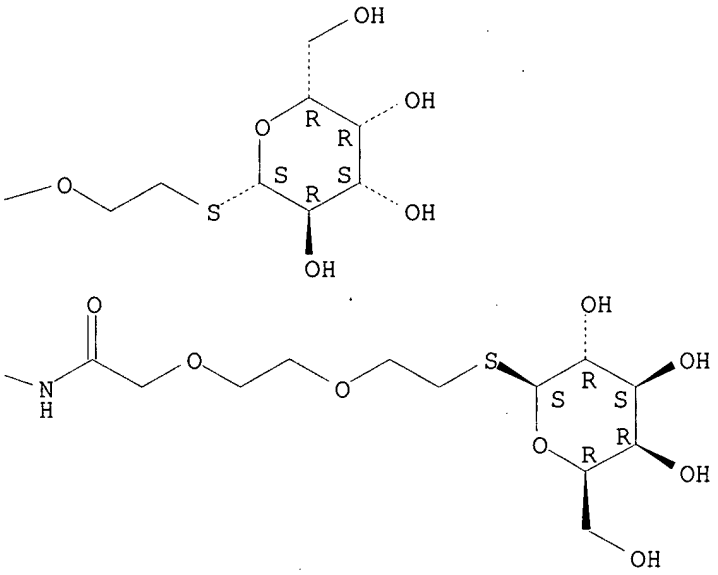
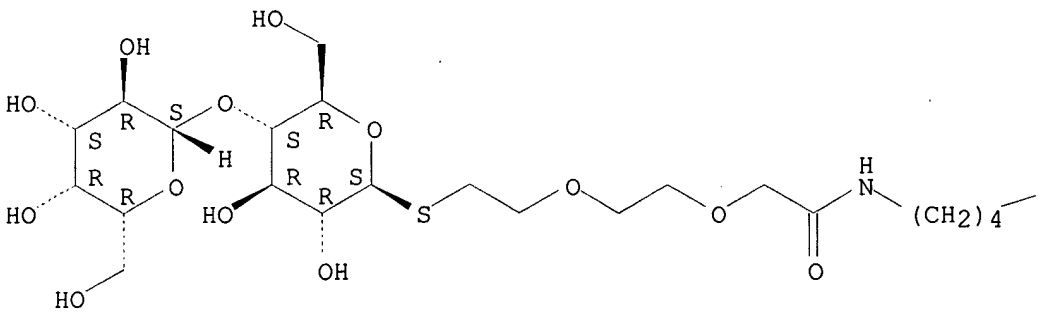


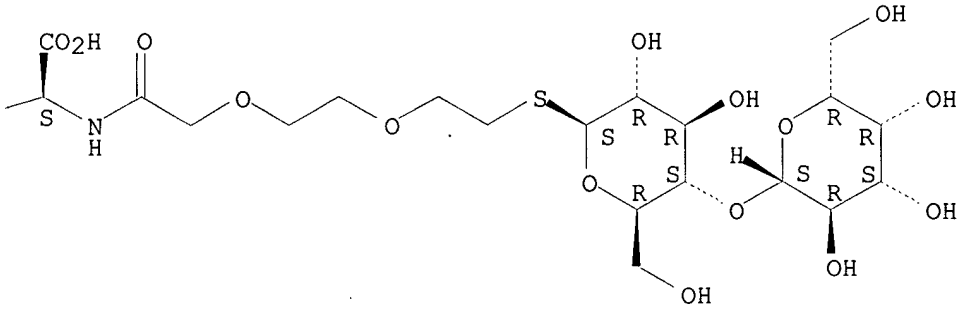
RN 310450-29-4 HCAPLUS
CN L-Lysine, N2,N6-bis[[2-[2-[(4-O-.beta.-D-galactopyranosyl-.beta.-D-glucopyranosyl)thio]ethoxy]ethoxy]acetyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



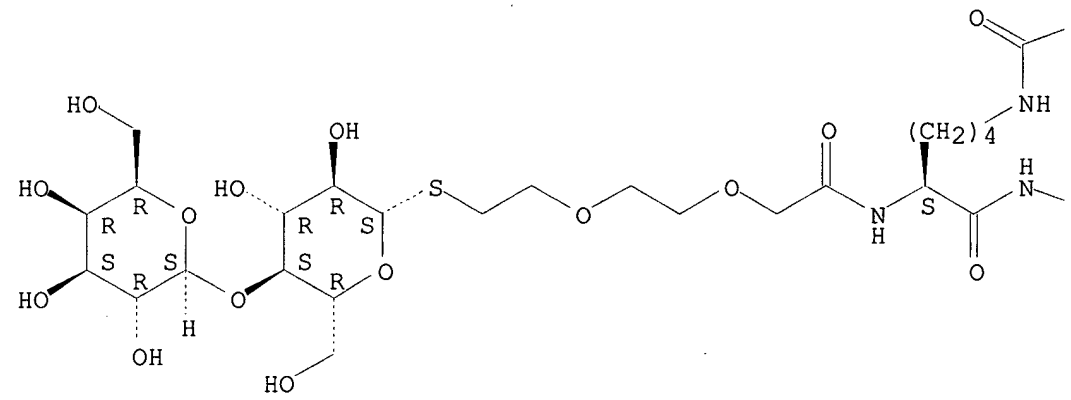
PAGE 1-B



RN 310450-33-0 HCAPLUS
CN L-Lysine, N2,N6-bis[[2-[2-[(4-O-.beta.-D-galactopyranosyl-.beta.-D-glucopyranosyl)thio]ethoxy]ethoxy]acetyl]-L-lysyl-N6-[[2-[2-[(4-O-.beta.-D-galactopyranosyl-.beta.-D-glucopyranosyl)thio]ethoxy]ethoxy]acetyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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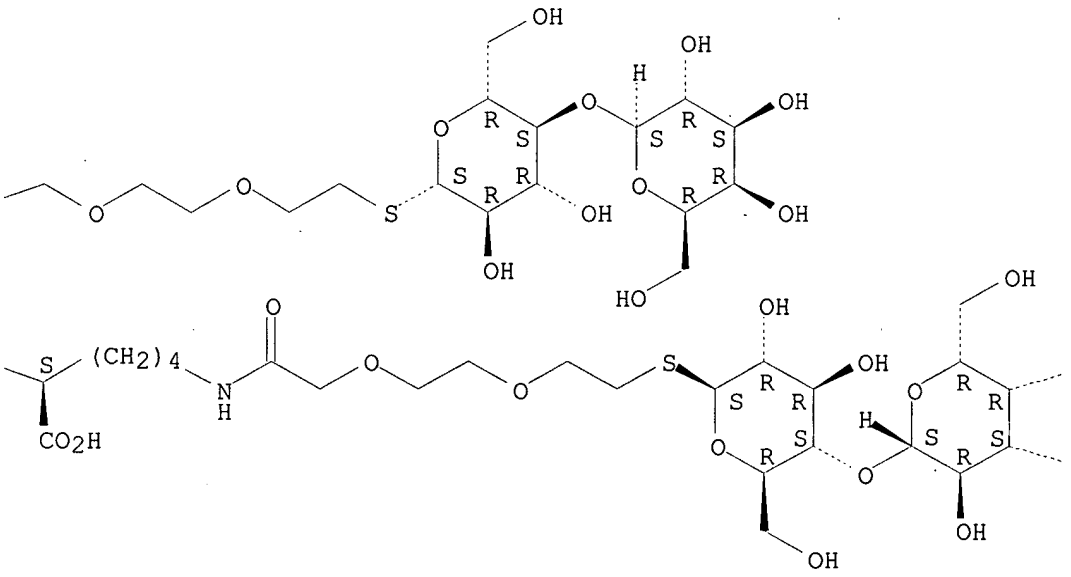


REFERENCE COUNT: 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 13 OF 33 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2000:697801 HCAPLUS
DOCUMENT NUMBER: 134:136596
TITLE: Synthesis and HPLC analysis of enzymatically cleavable **linker** consisting of poly(ethylene glycol) and dipeptide for the development of immunoconjugate
AUTHOR(S): Suzawa, T.; Nagamura, S.; Saito, H.; Ohta, S.; Hanai, N.; Yamasaki, M.
CORPORATE SOURCE: Tokyo Research Laboratories, Kyowa Hakko Kogyo Co., Ltd., Asahi-machi, Machida-shi, Tokyo, 194-8533, Japan
SOURCE: Journal of Controlled Release (2000), 69(1), 27-41
CODEN: JCREEC; ISSN: 0168-3659
PUBLISHER: Elsevier Science Ireland Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB A model compd. of antitumor agent, segment B of duocarmycin deriv. DU-86, was **conjugated** to tumor-specific antibody via a cleavable **linker** consisting of poly(ethylene glycol) (PEG) and dipeptide, l-alanyl-l-valine (Ala-Val), to confirm the feasibility of the **linker** for application to immunoconjugate. The release of segment B from the **linker** was evaluated by HPLC anal. When segment B was derivatized to have an amino residue and then linked to PEG through a dipeptide, segment B was cleaved at the peptide bond by a particular enzyme, thermolysin (EC 3.4.24.4), but not by plasmin (EC 3.4.2 1.7), indicating that certain protease specifically expressed at the tumor site would be capable of peptide-specific digestion and release of anti-tumor agent since a thermolysin-like enzyme has been reported to be expressed at many tumor cells. Furthermore, the results showing that cell ext. from G361 human melanoma had an ability to digest the **linker** peptide while the **linker** was stable in normal human serum suggested the tumor-specific activation of the **conjugated** agent. Segment B was **conjugated** via the **linker** to murine monoclonal antibody KM641 reactive to GD3 ganglioside to form immunoconjugate and the quant. release of segment B under the treatment with the enzyme was also confirmed. These results indicate the possibility of double targeting

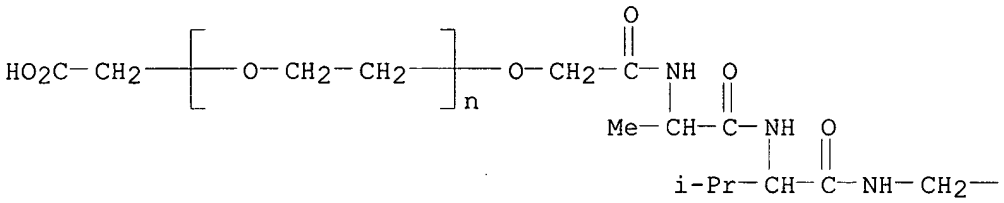
based on both the recognition ability of tumor specific antibody and tumor specific activation of the antitumor agents to enhance tumor treatment efficacy and to decrease unwanted side effects.

IT **321862-60-6P 321862-62-8P**
RL: ANT (Analyte); RCT (Reactant); SPN (Synthetic preparation); ANST (Analytical study); PREP (Preparation); RACT (Reactant or reagent)
(synthesis and HPLC anal. of enzymically cleavable **linker** consisting of PEG and dipeptide for development of immunoconjugate)

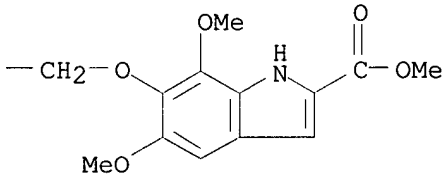
RN 321862-60-6 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), .alpha.-(carboxymethyl)-.omega.-hydroxy-, ether with N-(hydroxyacetyl)-L-alanyl-N-[2-[[5,7-dimethoxy-2-(methoxycarbonyl)-1H-indol-6-yl]oxy]ethyl]-L-valinamide (9CI) (CA INDEX NAME)

PAGE 1-A



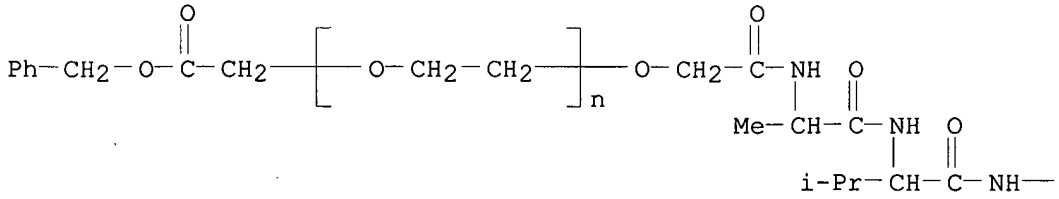
PAGE 1-B



RN 321862-62-8 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), .alpha.-[2-oxo-2-(phenylmethoxy)ethyl]-.omega.-hydroxy-, ether with N-(hydroxyacetyl)-L-alanyl-N-[2-[[5,7-dimethoxy-2-(methoxycarbonyl)-1H-indol-6-yl]oxy]ethyl]-L-valinamide (9CI) (CA INDEX NAME)

PAGE 1-A



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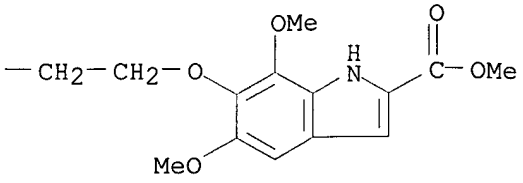
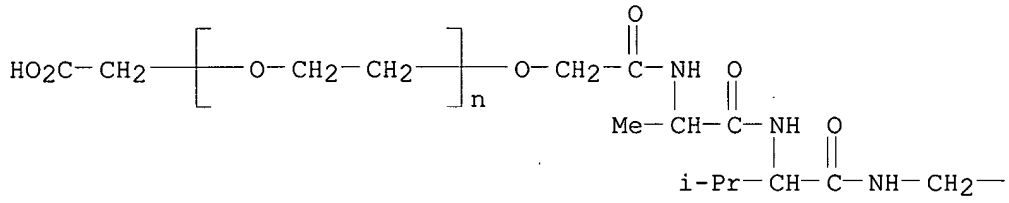
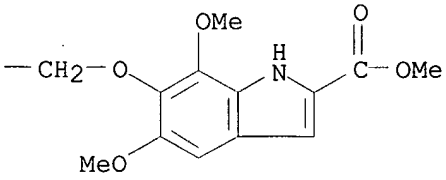


IT **321862-60-6DP, conjugates** with monoclonal antibodies
RL: ANT (Analyte); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(synthesis and HPLC anal. of enzymically cleavable **linker** consisting of PEG and dipeptide for development of immunoconjugate)
RN 321862-60-6 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), .alpha.-(carboxymethyl)-.omega.-hydroxy-, ether with N-(hydroxyacetyl)-L-alanyl-N-[2-[[5,7-dimethoxy-2-(methoxycarbonyl)-1H-indol-6-yl]oxy]ethyl]-L-valinamide (9CI) (CA INDEX NAME)

PAGE 1-A

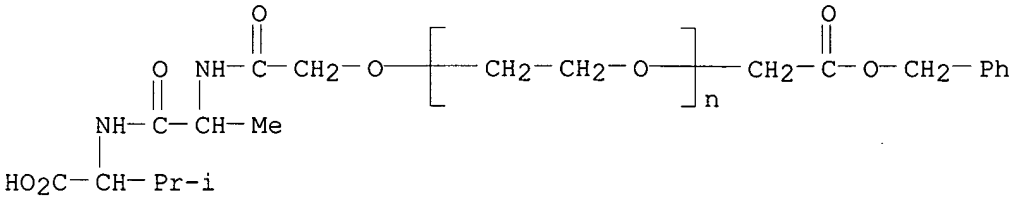


PAGE 1-B



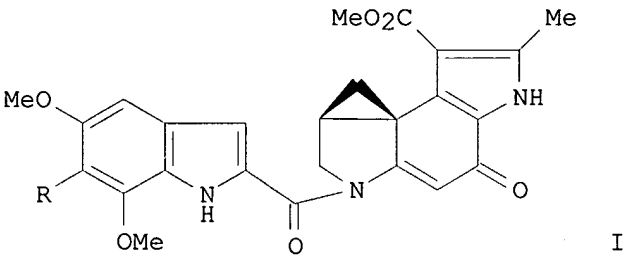
IT **303738-94-5P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(synthesis and HPLC anal. of enzymically cleavable **linker** consisting of PEG and dipeptide for development of immunoconjugate)
RN 303738-94-5 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), .alpha.-[2-oxo-2-(phenylmethoxy)ethyl]-.omega.-

hydroxy-, ether with hydroxyacetyl-L-alanyl-L-valine (9CI) (CA INDEX NAME)



REFERENCE COUNT: 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 14 OF 33 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2000:564511 HCAPLUS
DOCUMENT NUMBER: 133:335107
TITLE: Synthesis of a novel duocarmycin derivative DU-257 and its application to immunoconjugate using poly(ethylene glycol)-dipeptidyl **linker** capable of tumor specific activation
AUTHOR(S): Suzawa, T.; Nagamura, S.; Saito, H.; Ohta, S.; Hanai, N.; Yamasaki, M.
CORPORATE SOURCE: Tokyo Research Laboratories, Kyowa Hakko Kogyo Co., Ltd, Tokyo, 194-8533, Japan
SOURCE: Bioorganic & Medicinal Chemistry (2000), 8(8), 2175-2184
CODEN: BMECEP; ISSN: 0968-0896
PUBLISHER: Elsevier Science Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



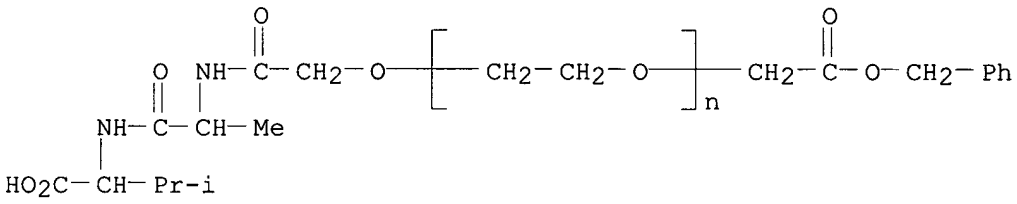
I

AB Novel anti-tumor agent, duocarmycin deriv. DU-257 [I; R = H2NCH2CH2O, (II)], was designed and synthesized to prep. immunoconjugate in order to confirm the feasibility of enzymically cleavable **linker** consisting of poly(ethylene glycol) (PEG) and dipeptide, L-alanyl-L-valine. Oxyethylamine arm was introduced at 4-methoxy position of segment B of DU-86 [I; R = OMe, (III)] to form II and evaluated its property. II retained similar stability and potency with III while enhanced hydrophilicity suggested. II was condensed to the PEG-dipeptidyl **linker** through carboxyl terminal of dipeptide, and enzymic release of II using a model enzyme, thermolysin, similar enzyme of which was shown to be overexpressed at various tumor sites, was evaluated by HPLC anal. Cleavage between the **linker** amino acids by the model protease

and release of II as valine **conjugated** form was confirmed. The enzymically released form of II expressed its cytotoxicity without loss of the potency for HeLaS3 and SW1116 tumor cell lines, although the efficacy was different in individual cells. II was then **conjugated** through the **linker** to KM231 monoclonal antibody specifically reactive to GD3 antigen which was shown to be expressed on the surface of many malignant tumors such as SW1116. The **conjugate** retained its binding specificity for SW1116 cell with a similar activity with KM231. Furthermore, the **conjugate** showed significant growth inhibition on SW1116 cell at a concn. of 75 .mu.g/mL while no effect on antigen neg. cell, HeLaS3. These results suggest that the **conjugate** retained its anti-tumor effect only when it bound on and was activated at the target cell, simultaneously. II will be one of the candidate of anti-tumor agent for application to immunoconjugate and its **conjugate** with KM231 via PEG-dipeptidyl **linker** will be a useful entity for cancer therapy related to sLea expression.

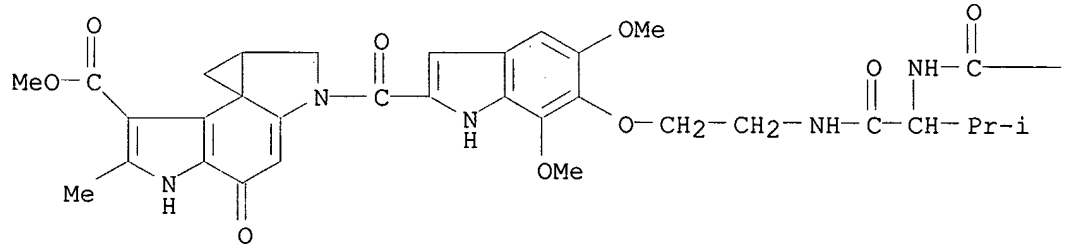
IT **303738-94-5P 303738-95-6P 303738-96-7P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(synthesis of a novel duocarmycin deriv. DU-257 and its application to immunoconjugate using poly(ethylene glycol)-dipeptidyl **linker** capable of tumor specific activation)

RN 303738-94-5 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), .alpha.-[2-oxo-2-(phenylmethoxy)ethyl]-.omega.-hydroxy-, ether with hydroxyacetyl-L-alanyl-L-valine (9CI) (CA INDEX NAME)



RN 303738-95-6 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), .alpha.-[2-oxo-2-(phenylmethoxy)ethyl]-.omega.-hydroxy-, ether with hydroxyacetyl-L-alanyl-N-[2-[[5,7-dimethoxy-2-[[(7bR,8aS)-4,5,8,8a-tetrahydro-7-(methoxycarbonyl)-6-methyl-4-oxocyclopropa[c]pyrrolo[3,2-e]indol-2(1H)-yl]carbonyl]-1H-indol-6-yl]oxy]ethyl]-L-valinamide (9CI) (CA INDEX NAME)

PAGE 1-A



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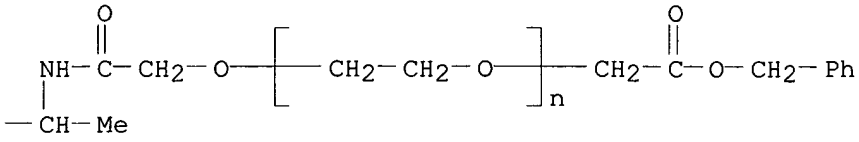
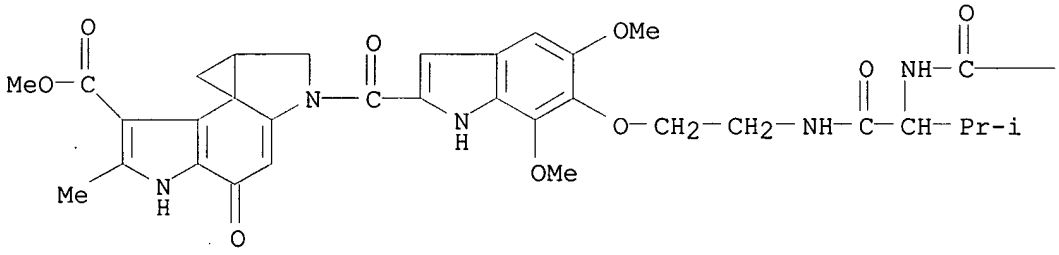


RN 303738-96-7 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), .alpha.-(carboxymethyl)-.omega.-hydroxy-, ether with hydroxyacetyl-L-alanyl-N-[2-[[5,7-dimethoxy-2-[[(7bR,8aS)-4,5,8,8a-tetrahydro-7-(methoxycarbonyl)-6-methyl-4-oxocyclopropa[c]pyrrolo[3,2-e]indol-2(1H)-yl]carbonyl]-1H-indol-6-yl]oxy]ethyl]-L-valinamide (9CI) (CA INDEX NAME)

PAGE 1-A



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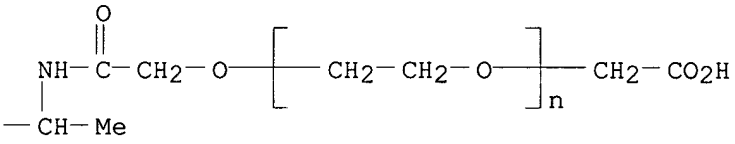
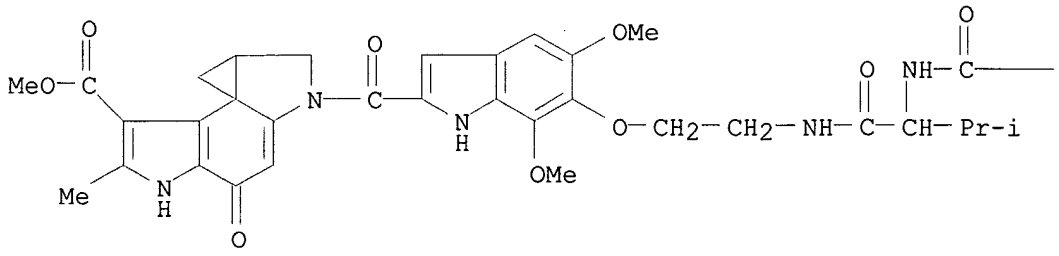


IT **303738-97-8DP**, KM231 antibody bound
RL: SPN (Synthetic preparation); PREP (Preparation)
(synthesis of a novel duocarmycin deriv. DU-257 and its application to immunoconjugate using poly(ethylene glycol)-dipeptidyl **linker** capable of tumor specific activation)
RN 303738-97-8 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), .alpha.-(2-amino-2-oxoethyl)-.omega.-hydroxy-, ether with hydroxyacetyl-L-alanyl-N-[2-[[5,7-dimethoxy-2-[[(7bR,8aS)-4,5,8,8a-tetrahydro-7-(methoxycarbonyl)-6-methyl-4-oxocyclopropa[c]pyrrolo[3,2-e]indol-2(1H)-yl]carbonyl]-1H-indol-6-yl]oxy]ethyl]-L-valinamide (9CI) (CA INDEX NAME)

PAGE 1-A



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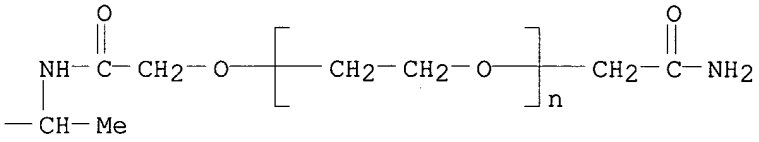

REFERENCE COUNT: 40 THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 15 OF 33 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2000:373648 HCAPLUS
DOCUMENT NUMBER: 133:155260
TITLE: Camptothecin delivery systems: the utility of amino acid spacers for the **conjugation** of camptothecin with polyethylene glycol to create prodrugs
AUTHOR(S): Conover, Charles D.; Greenwald, Richard B.; Pendri, Annapurna; Shum, Kwok L.
CORPORATE SOURCE: Research and Development, Enzon Inc., Piscataway, NJ, 08854-3969, USA
SOURCE: Anti-Cancer Drug Design (1999), 14(6), 499-506
CODEN: ACDDEA; ISSN: 0266-9536
PUBLISHER: Oxford University Press
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The primary purpose of this study was to screen individual amino acid spacers in polyethylene glycol (PEG) **conjugated** camptothecin for their impact on the **conjugates'** antitumor activity. Secondly, an active member of this series was used to assess the PEG-camptothecin **conjugate's** efficacy against a battery of solid tumor types. PEG-camptothecin is a novel water sol. transport form (macromol. prodrug) of the naturally derived antitumor drug, 20-(S)-camptothecin (CPT). Rates of hydrolysis were studied in phosphate buffered saline (PBS) and the plasma of both rats and humans. In vivo efficacy screens were performed against P388/0 murine leukemia and LS174T human colon solid tumor xenograft models. The results showed that while all the derivs. had considerable stability in PBS, their rates of hydrolysis varied in both rat and human plasma according to the amino acid **spacer** employed. Not surprisingly, changing the amino acid also affected in vivo toxicity and efficacy in the treatment of ascites and solid tumors. A representative of this amino acid series, PEG-alanine-CPT, which showed moderate activity in the solid tumor screen, was chosen for evaluation of

efficacy across a wide range of solid tumor types and demonstrated significant antitumor activity (%T/C < 30%) in all tested xenograft models (colon, ovarian, mammary, lung, pancreatic and prostate). Therefore, this study showed that the use of specific amino acid spacers affected both the PEG-camptothecin **conjugates'** breakdown and biol. activity. We anticipate that using these insights, this sol. macromol. transport technol. could be successfully employed with a no. of antitumor drugs.

IT **182064-91-1 203066-49-3 287482-82-0**
287482-83-1 287482-84-2 287482-85-3
RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(camptothecin delivery systems: utility of amino acid spacers for **conjugation** of camptothecin with polyethylene glycol to create prodrugs)

RN 182064-91-1 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), .alpha.-[2-[[2-[[(4S)-4-ethyl-3,4,12,14-tetrahydro-3,14-dioxo-1H-pyrano[3',4':6,7]indolizino[1,2-b]quinolin-4-yl]oxy]-2-oxoethyl]amino]-2-oxoethyl]-.omega.-[2-[[2-[[(4S)-4-ethyl-3,4,12,14-tetrahydro-3,14-dioxo-1H-pyrano[3',4':6,7]indolizino[1,2-b]quinolin-4-yl]oxy]-2-oxoethyl]amino]-2-oxoethoxy]- (9CI) (CA INDEX NAME)

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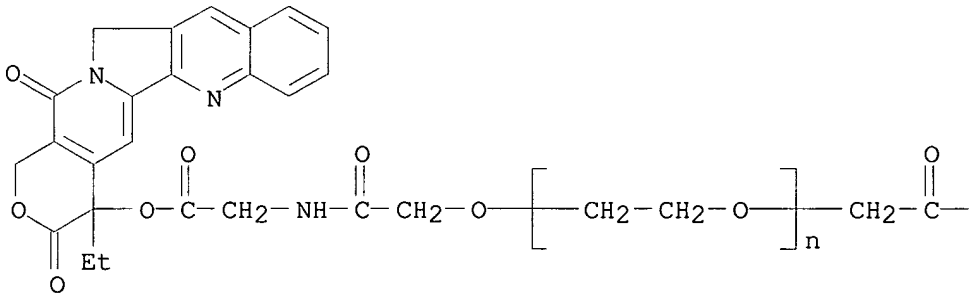

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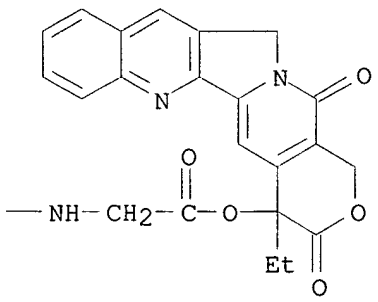
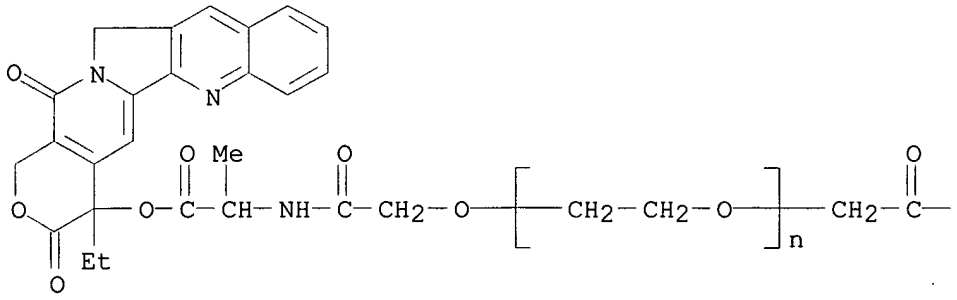


RN 203066-49-3 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), .alpha.-[2-[[(1S)-2-[[(4S)-4-ethyl-3,4,12,14-tetrahydro-3,14-dioxo-1H-pyrano[3',4':6,7]indolizino[1,2-b]quinolin-4-yl]oxy]-1-methyl-2-oxoethyl]amino]-2-oxoethyl]-.omega.-[2-[[(1S)-2-[[(4S)-4-ethyl-3,4,12,14-tetrahydro-3,14-dioxo-1H-pyrano[3',4':6,7]indolizino[1,2-b]quinolin-4-yl]oxy]-1-methyl-2-oxoethyl]amino]-2-oxoethoxy]- (9CI) (CA

INDEX NAME)

PAGE 1-A



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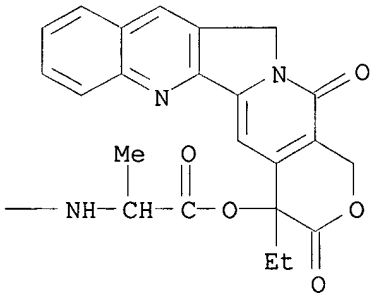
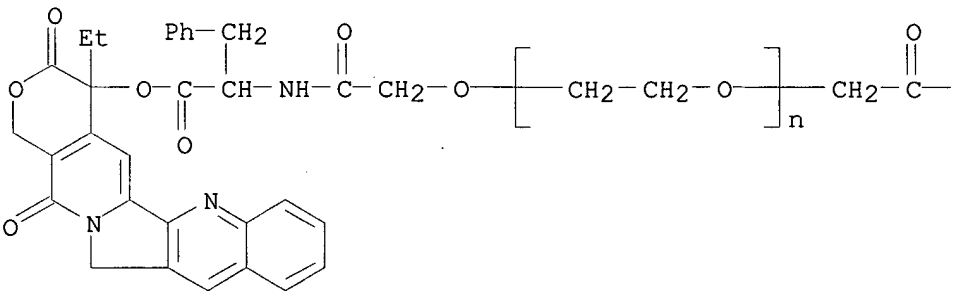


RN 287482-82-0 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), .alpha.-[2-[[(1S)-2-[[(4S)-4-ethyl-3,4,12,14-tetrahydro-3,14-dioxo-1H-pyrano[3',4':6,7]indolizino[1,2-b]quinolin-4-yl]oxy]-2-oxo-1-(phenylmethyl)ethyl]amino]-2-oxoethyl]-.omega.-[2-[[(1S)-2-[[(4S)-4-ethyl-3,4,12,14-tetrahydro-3,14-dioxo-1H-pyrano[3',4':6,7]indolizino[1,2-b]quinolin-4-yl]oxy]-2-oxo-1-(phenylmethyl)ethyl]amino]-2-oxoethoxy]- (9CI) (CA INDEX NAME)

PAGE 1-A



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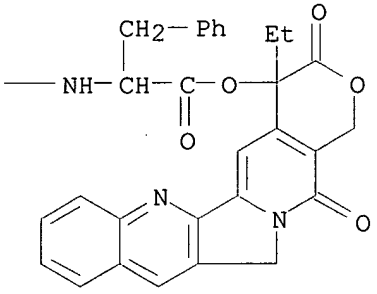
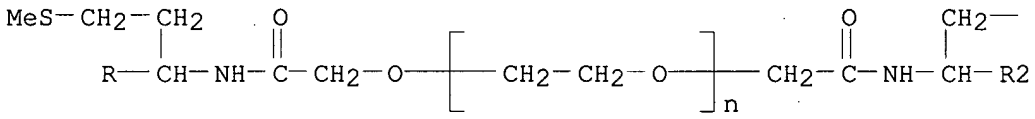
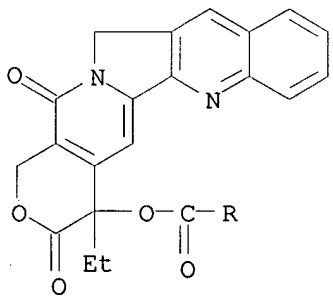


RN 287482-83-1 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), .alpha.-[2-[[(1S)-1-[[[(4S)-4-ethyl-3,4,12,14-tetrahydro-3,14-dioxo-1H-pyrano[3',4':6,7]indolizino[1,2-b]quinolin-4-yl]oxy]carbonyl]-3-(methylthio)propyl]amino]-2-oxoethyl]-.omega.-[2-[[(1S)-1-[[[(4S)-4-ethyl-3,4,12,14-tetrahydro-3,14-dioxo-1H-pyrano[3',4':6,7]indolizino[1,2-b]quinolin-4-yl]oxy]carbonyl]-3-(methylthio)propyl]amino]-2-oxoethoxy]- (9CI) (CA INDEX NAME)

PAGE 1-A





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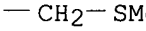

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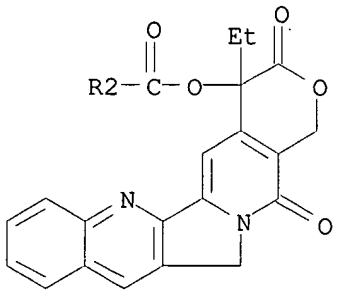

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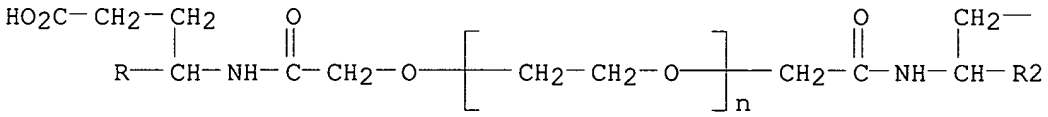
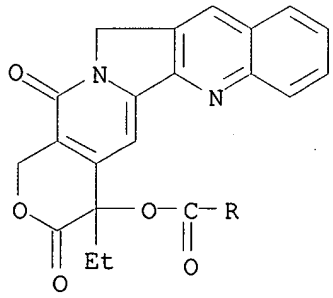
PAGE 1-A





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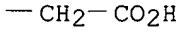

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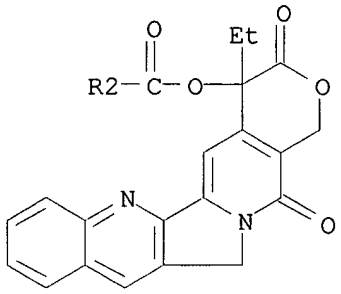

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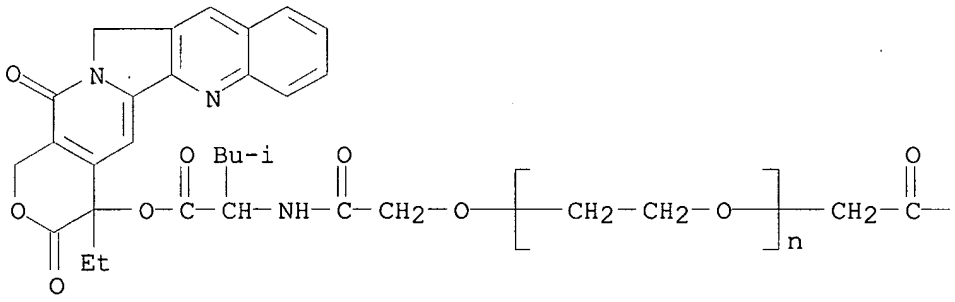
PAGE 1-A



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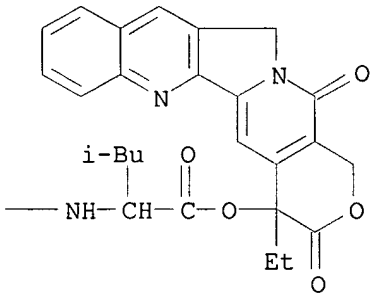


REFERENCE COUNT: 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 16 OF 33 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1999:811268 HCAPLUS
DOCUMENT NUMBER: 132:36036
TITLE: Preparation of **oligosaccharide**

conjugates of NAPAP or NAPAP-analogs as antithrombotics

INVENTOR(S): Basten, Johannes Egbertus Maria; Van Boeckel, Constant Adriaan Anton; Buijsman, Rogier Christian; Dreef-Tromp, Cornelia Maria

PATENT ASSIGNEE(S): Akzo Nobel N.V., Neth.; Universiteit Leiden

SOURCE: PCT Int. Appl., 36 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9965934	A1	19991223	WO 1999-EP4100	19990611
W: AL, AU, BA, BB, BG, BR, CA, CN, CU, CZ, EE, GE, HU, ID, IL, IN, IS, JP, KP, KR, LC, LK, LR, LT, LV, MG, MK, MN, MX, NO, NZ, PL, RO, RU, SG, SI, SK, SL, TR, TT, UA, US, UZ, VN, YU, ZA, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 9945129	A1	20000105	AU 1999-45129	19990611
BR 9911300	A	20010403	BR 1999-11300	19990611
EP 1087992	A1	20010404	EP 1999-927976	19990611
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
NO 2000006317	A	20010214	NO 2000-6317	20001212

PRIORITY APPLN. INFO.: EP 1998-202037 A 19980617
WO 1999-EP4100 W 19990611

OTHER SOURCE(S): MARPAT 132:36036

GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Compds. of formula I (R1 = Ph, naphthyl, 1,2,3,4-tetrahydronaphthyl, (iso)quinolinyl, tetrahydro(iso)quinolinyl, 3,4-dihydro-1H-isoquinolinyl, chromanyl, or camphor, optionally substituted with one or more (C1-8)alkyl or (C1-8)alkoxy groups; R2 and R3 = independently H or (C1-8)alkyl; R4 = (C1-8)alkyl or (C3-8)cycloalkyl; or R3 and R4 together with the nitrogen atom to which they are bonded are a nonarom. (4-8)membered ring optionally contg. another heteroatom, the ring optionally substituted with (C1-8)alkyl or SO2-(C1-8)alkyl; Q is a **spacer** having a chain length of 10 to 70 atoms; and Z is a neg. charged **oligosaccharide** residue comprising two to six **monosaccharide** units, the charge being compensated by pos. charged counterions) or a pharmaceutically acceptable salt or a prodrug thereof, were prepd. as antithrombotic agents for use in treating or preventing thrombin-related diseases. Compds. I have anti-thrombin activity and anti-thrombin III mediated anti-Xa activity as well as a long plasma half-life as compared to N.sigma.-(2-naphthylsulfonyl)-glycyl-4-amidinophenylalaninpiperidine (NAPAP). Thus, title compd. II was prepd. and exhibited antithrombin activity (IC50 = 3.5x10-7mol/L) and anti-factor Xa activity of 885 U/mg.

IT **252575-19-2P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);

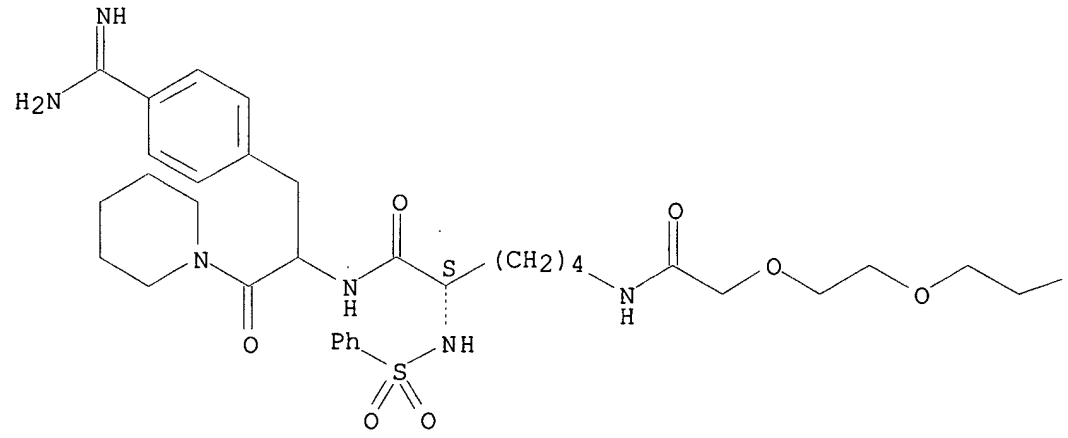
BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of **oligosaccharide conjugates** of NAPAP or NAPAP-analogs as antithrombotics)

RN 252575-19-2 HCAPLUS

CN 6,9,12,15-Tetraoxa-3-thia-18-azatetracosanediamide, N24-[1-[[4-(aminoiminomethyl)phenyl]methyl]-2-oxo-2-(1-piperidinyl)ethyl]-17-oxo-23-[(phenylsulfonyl)amino]-N1-[20-[(O-2,3,4,6-tetra-O-phosphono-.alpha.-D-glucopyranosyl-(1.fwdarw.4)-O-2,3,6-tri-O-phosphono-.alpha.-D-glucopyranosyl-(1.fwdarw.4)-2,3,6-tri-O-phosphono-.beta.-D-glucopyranosyl)oxy]-3,6,9,12,15-pentaoxaeicos-1-yl]-, (23S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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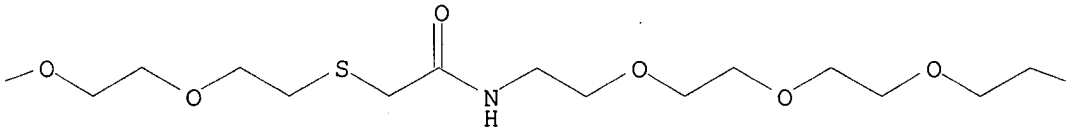

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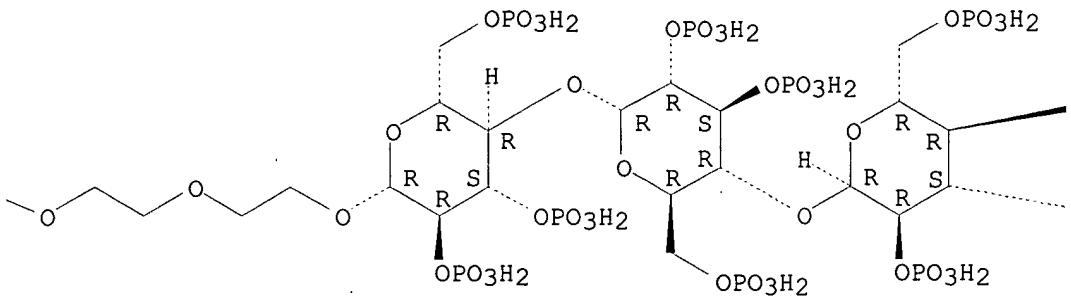

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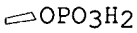
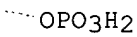
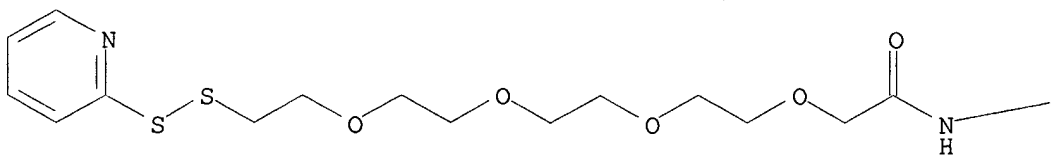




IT **252575-15-8P 252575-16-9P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of **oligosaccharide conjugates** of NAPAP or NAPAP-analogs as antithrombotics)
RN 252575-15-8 HCAPLUS
CN 3,6,9,12-Tetraoxa-15-azaheneicosan-21-oic acid, 14-oxo-20-[(phenylsulfonyl)amino]-1-(2-pyridinyldithio)-, (20S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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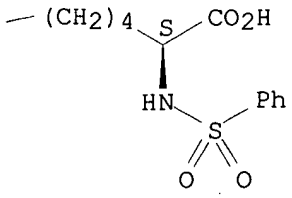
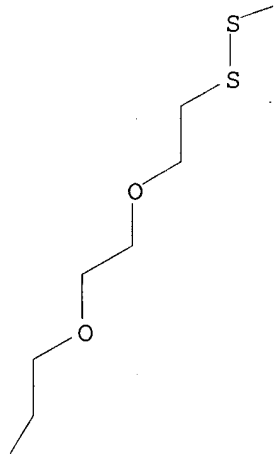


RN 252575-16-9 HCAPLUS
CN 3,6,9,12-Tetraoxa-15-azaheneicosan-21-amide, N-[1-[[4-(aminoiminomethyl)phenyl]methyl]-2-oxo-2-(1-piperidinyl)ethyl]-14-oxo-20-[(phenylsulfonyl)amino]-1-(2-pyridinyldithio)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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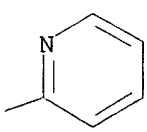

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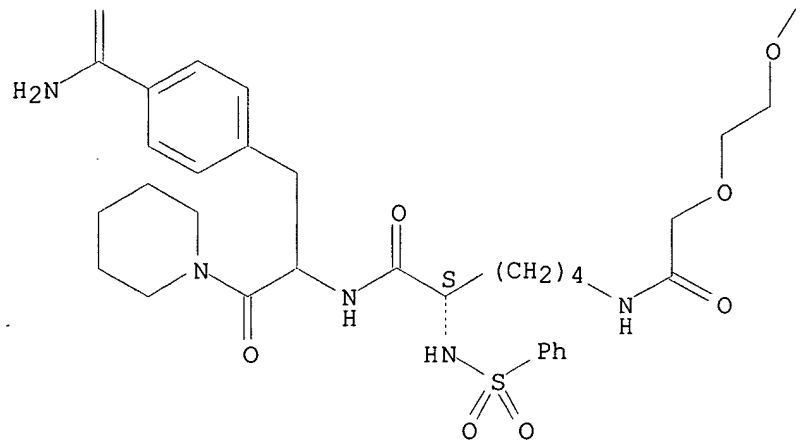


REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 17 OF 33 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1999:791232 HCAPLUS
DOCUMENT NUMBER: 132:141817
TITLE: Differential Reactivity of Maleimide and Bromoacetyl Functions with Thiols: Application to the Preparation of Liposomal Diepitope Constructs
AUTHOR(S): Schelte, Philippe; Boeckler, Christophe; Frisch, Benoit; Schuber, Francis
CORPORATE SOURCE: Laboratoire de Chimie Bioorganique, UMR 7514 CNRS-Universite Louis Pasteur, Strasbourg-Illkirch, 67400, Fr.
SOURCE: Bioconjugate Chemistry (2000), 11(1), 118-123 CODEN: BCCHES; ISSN: 1043-1802
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The comparative reactivity of maleimide and bromoacetyl groups with thiols (2-mercaptoethanol, free cysteine, and cysteine residues present at the N-terminus of peptides) was investigated in aq. media. These studies were performed (i) with water-sol. functionalized model mols., i.e., polyoxyethylene-based **spacer** arms that could also be coupled to lipophilic anchors destined to be incorporated into liposomes, and (ii) with small unilamellar liposomes carrying at their surface these thiol-reactive functions. Our results indicate that an important kinetic discrimination (2-3 orders of magnitude in terms of rate consts.) can be achieved between the maleimide and bromoacetyl functions when the reactions with thiols are performed at pH 6.5. The bromoacetyl function which reacts at higher pH values (e.g., pH 9.0) retained a high chemoselectivity; i.e., under conditions where it reacted appreciably with the thiols of, e.g., HS-peptides, it did react with other nucleophilic functions such as .alpha.- and .epsilon.-amino groups or imidazole, which could also be present in peptides. This differential reactivity was applied to design chem. defined and highly immunogenic liposomal diepitope constructs as synthetic vaccines, i.e., vesicles carrying at their surface two different peptides **conjugated** each to a specific amphiphilic

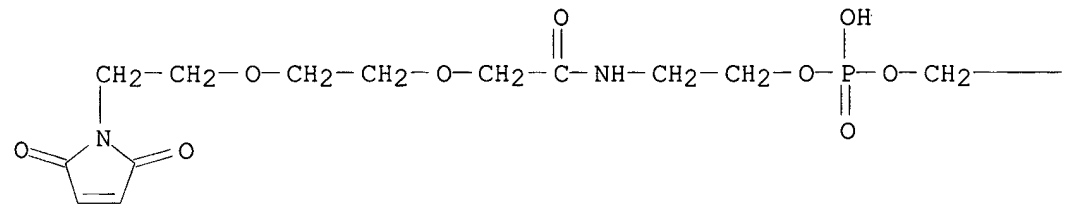
anchor. This was realized by coupling sequentially at pH 6.5 and 9.0 two HS-peptides to preformed vesicles contg. lipophilic anchors functionalized with maleimide and bromoacetyl groups (Boeckler, C., et al., 1999).

IT **163277-91-6**
RL: RCT (Reactant); RACT (Reactant or reagent)
(differential reactivity of maleimide and bromoacetyl functions with thiols and application to prepn. of liposomal diepitope constructs)

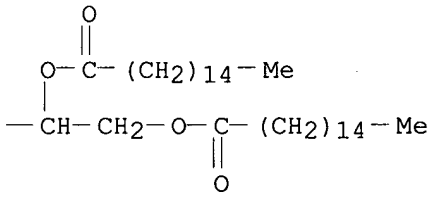
RN 163277-91-6 HCAPLUS

CN Hexadecanoic acid, 1-[15-(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)-3-hydroxy-3-oxido-8-oxo-2,4,10,13-tetraoxa-7-aza-3-phosphapentadec-1-yl]-1,2-ethanediyl ester (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B

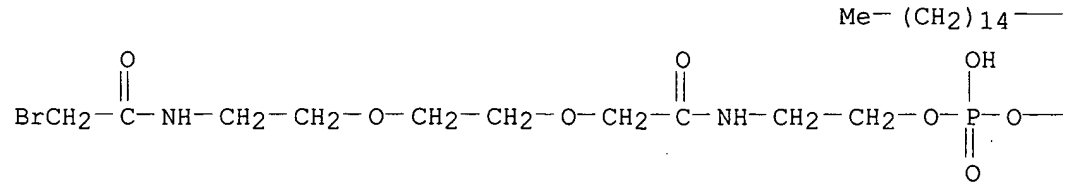


IT **257281-84-8P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(differential reactivity of maleimide and bromoacetyl functions with thiols and application to prepn. of liposomal diepitope constructs)

RN 257281-84-8 HCAPLUS

CN Hexadecanoic acid, 1-(18-bromo-3-hydroxy-3-oxido-8,17-dioxo-2,4,10,13-tetraoxa-7,16-diaza-3-phosphaoctadec-1-yl)-1,2-ethanediyl ester (9CI) (CA INDEX NAME)

PAGE 1-A



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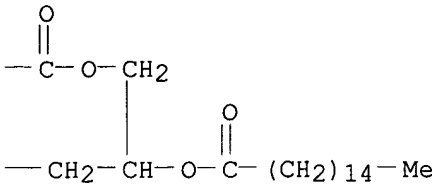


REFERENCE COUNT: 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 18 OF 33 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1999:764288 HCAPLUS
DOCUMENT NUMBER: 132:20801
TITLE: The preparation of molecular rods and their application for the fixation and crystallization of biomolecules
INVENTOR(S): Balavoine, Fabrice; Mioskowski, Charles; Schultz, Patrick
PATENT ASSIGNEE(S): Commissariat A L'Energie Atomique, Fr.; Centre National De La Recherche Scientifique-CNRS
SOURCE: PCT Int. Appl., 47 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9961912	A1	19991202	WO 1999-FR1207	19990521
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
FR 2778918	A1	19991126	FR 1998-6540	19980525
FR 2778918	B1	20000721		
EP 1080368	A1	20010307	EP 1999-920903	19990521
R: DE, FR, GB, NL				
AU 9938307	A1	19991213	AU 1999-38307	19990526

PRIORITY APPLN. INFO.: FR 1998-6540 A 19980525
WO 1999-FR1207 W 19990521

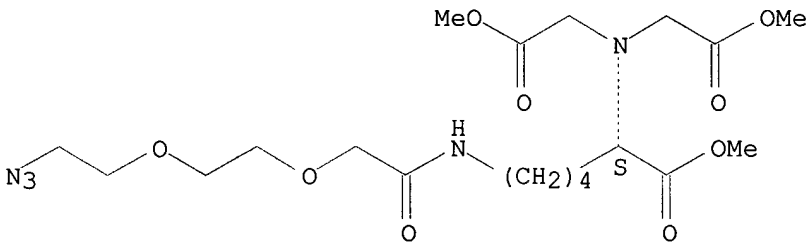
AB The invention concerns mol. rods, their uses in a method for fixing and/or crystg. macromols., the resulting products and uses of said products in the field of materials and structural biol., in particular as biosensors or as biomaterials. Said mol. rods have a structure represented by the general formula GF-(P-Ep)n, where P = polyphenyl, polyphenylene vinyl, polystyrene, polyvinyl and their derivs.; the GF functional group represents the a B-R type group, B being the arm or the **linker** group, and is a C1-C10 satd. chain with alkyl substituents, or a polyoxyethylene, or a phosphate group contg. chain, that contain functional groups at their ends, e.g. O, NHCO, OCO, COO, CONH, S, CH2, NH;

R = a hydrophile group, with pos. or neg. charge, or an organometal complex that interacts with amino acids and nucleic acids and the ligands can bind to the alkyl groups of the **spacer** E; n = 5-1000, p = 0-10; the **spacer** E = phenylene, ethylene, vinyl, and their derivs. contg. alkyl, OH, O-alkyl NH2 etc. substituents, the **spacer** E does not interfere with the rigidity of the P rod part. The method consists in incubating, for 15 min-48 h, a biol. macromol. in soln. with a mol. rod at room temp., and pH 5.5-8.5 in an aq. soln. that can contain detergents. The biol. macromols. are bound to the mol. rods by non-covalent forces; the crystal formation is achieved via self-assembly. The method can be used for microscopic and crystallog. studies of proteins and nucleic acids. Thus nickel-NTA derivatized mol. rod was synthesized and used for the fixation of the RNA polymerase histidine-tagged ABC23 subunit; the process was performed at pH 8. After 18 h the nickel-NTA chelated His-tagged fragment was isolated by gel filtration and obsd. with electron microscope.

IT **251564-46-2P 251564-47-3P 251564-48-4P**
251564-49-5P 251564-58-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of mol. rods and application for fixation and crystn. of biomols.)

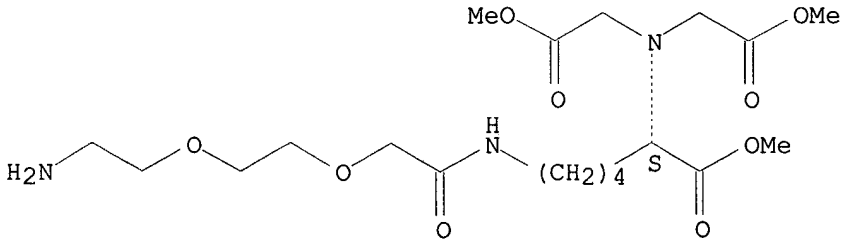
RN 251564-46-2 HCAPLUS
CN 3,6-Dioxa-9,15-diazaheptadecan-17-oic acid, 1-azido-14-(methoxycarbonyl)-15-(2-methoxy-2-oxoethyl)-8-oxo-, methyl ester, (14S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 251564-47-3 HCAPLUS
CN 3,6-Dioxa-9,15-diazaheptadecan-17-oic acid, 1-amino-14-(methoxycarbonyl)-15-(2-methoxy-2-oxoethyl)-8-oxo-, methyl ester, (14S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

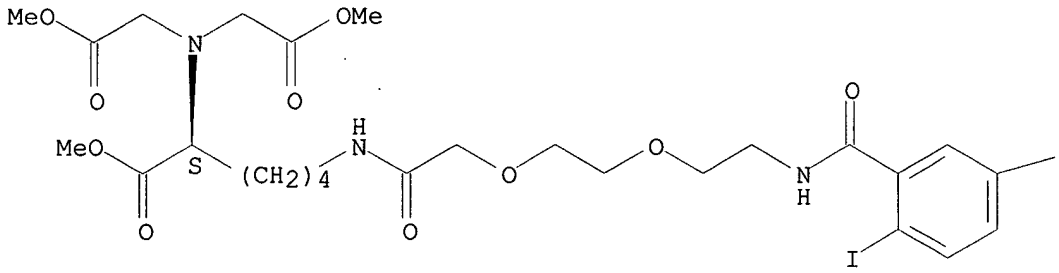


RN 251564-48-4 HCAPLUS
CN 5,8-Dioxa-2,11,17-triazanonadecan-19-oic acid, 1-(5-ethynyl-2-iodophenyl)-

16-(methoxycarbonyl)-17-(2-methoxy-2-oxoethyl)-1,10-dioxo-, methyl ester, (16S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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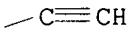
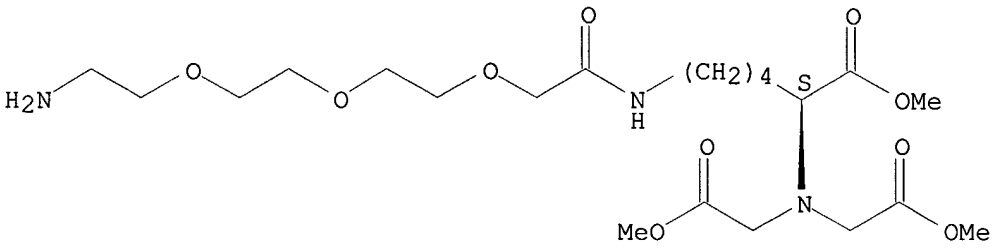


RN 251564-49-5 HCAPLUS
CN 3,6,9-Trioxa-12,18-diazaeicosan-20-oic acid, 1-amino-17-(methoxycarbonyl)-18-(2-methoxy-2-oxoethyl)-11-oxo-, methyl ester, (17S)- (9CI) (CA INDEX NAME)

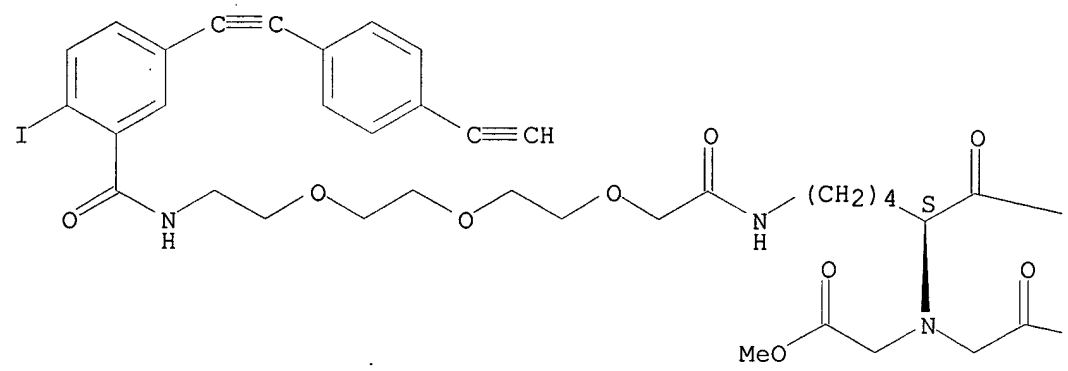
Absolute stereochemistry.



RN 251564-58-6 HCAPLUS
CN 5,8,11-Trioxa-2,14,20-triazadocosan-22-oic acid, 1-[5-[(4-ethynylphenyl)ethynyl]-2-iodophenyl]-19-(methoxycarbonyl)-20-(2-methoxy-2-oxoethyl)-1,13-dioxo-, methyl ester, (19S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

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REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 19 OF 33 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1999:242945 HCAPLUS
DOCUMENT NUMBER: 131:72399
TITLE: Multivalent Thioether-Peptide **Conjugates**: B Cell Tolerance of an Anti-Peptide Immune Response
AUTHOR(S): Jones, David S.; Coutts, Stephen M.; Gamino, Christina A.; Iverson, G. Michael; Linnik, Matthew D.; Randow, Martina E.; Ton-Nu, Huong-Thu; Victoria, Edward J.
CORPORATE SOURCE: La Jolla Pharmaceutical Company, San Diego, CA, 92121, USA
SOURCE: Bioconjugate Chemistry (1999), 10(3), 480-488
CODEN: BCCHES; ISSN: 1043-1802
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Antibodies which bind .beta.2-glycoprotein I (.beta.2GPI) are assocd. with antiphospholipid syndrome. Synthetic peptide mimotopes have been discovered which compete with .beta.2GPI for binding to selected anti-.beta.2GPI. A thiol-contg. **linker** was attached to the N-terminus of two cyclic thioether peptide mimotopes, peptides 1a and 1b. The resulting peptides, with **linker** attached, were reacted with

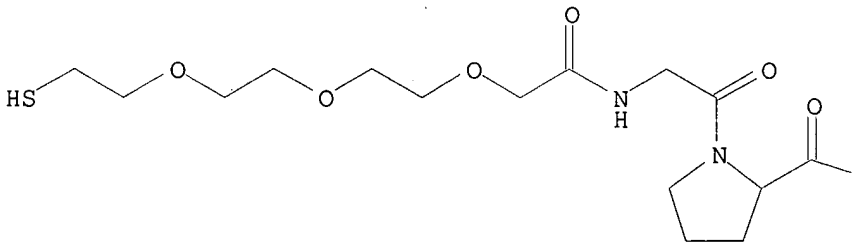
two different haloacetylated platforms to prep. four tetravalent peptide-platform **conjugates** to be tested as B cell toleragens. The **linker**-contg. peptides were reacted with maleimide-derivatized keyhole limpet hemocyanin (KLH) to provide peptide-KLH **conjugates**. Peptides 1a and 1b were also modified by acylation with 3-(4'-hydroxyphenyl)propionic acid N-hydroxysuccinimidyl ester. The resulting hydroxyphenyl peptides were radioiodinated and used to measure anti-peptide antibody levels. The KLH **conjugates** were used to immunize mice to generate an anti-peptide immune response. The immunized mice were treated with the **conjugates** or saline soln. and boosted with the appropriate peptide-KLH **conjugate**. Three of the four **conjugates** suppressed the formation of anti-peptide antibody. The stabilities of the **conjugates** in mouse serum were measured, and the relative stabilities did not correlate with ability to suppress antibody formation.

IT **200291-36-7P 228403-75-6P 228403-76-7P**
228403-77-8P 228403-78-9DP, conjugates with
keyhole limpet hemocyanin **228403-79-0DP, conjugates**
with keyhole limpet hemocyanin
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and reaction of; multivalent thioether-peptide **conjugates** in relation to B-cell tolerance)

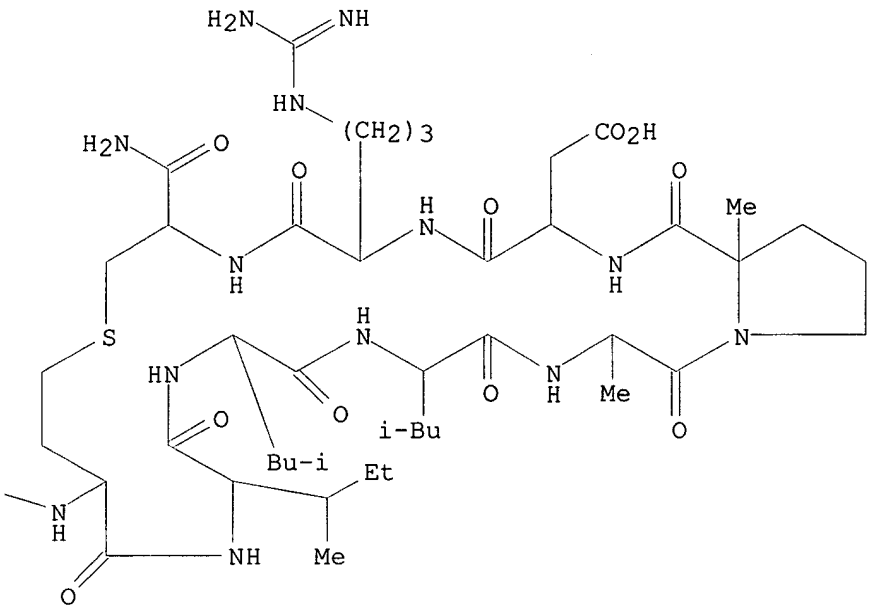
RN 200291-36-7 HCAPLUS

CN L-Cysteinamide, N-[[2-[2-(2-mercaptoethoxy)ethoxy]ethoxy]acetyl]glycyl-L-prolyl-L-homocysteinyl-L-isoleucyl-L-leucyl-L-leucyl-L-alanyl-2-methyl-L-prolyl-L-.alpha.-aspartyl-L-arginyl-, cyclic (3.fwdarw.11)-thioether (9CI) (CA INDEX NAME)

PAGE 1-A

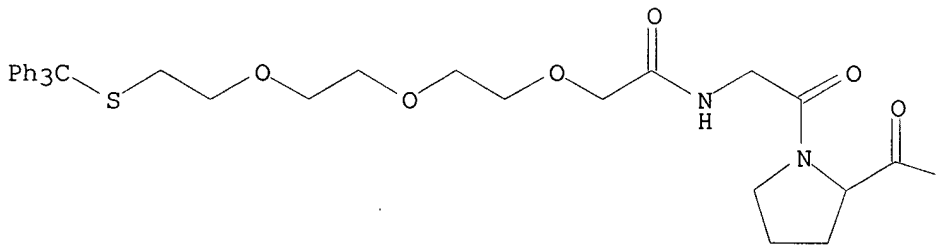


PAGE 1-B



RN 228403-75-6 HCAPLUS
CN L-Cysteinamide, N-(1-oxo-13,13,13-triphenyl-3,6,9-trioxa-12-thiatridec-1-yl)glycyl-L-prolyl-L-homocysteinyl-L-isoleucyl-L-leucyl-L-leucyl-L-alanyl-2-methyl-L-prolyl-L-.alpha.-aspartyl-L-arginyl-, cyclic (3.fwdarw.11)-thioether (9CI) (CA INDEX NAME)

PAGE 1-A



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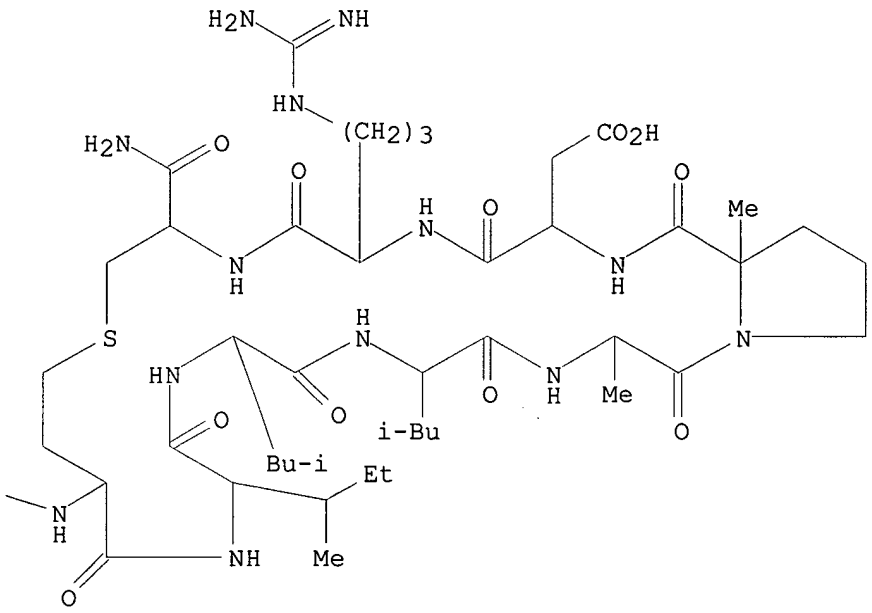

RN 228403-76-7 HCAPLUS
CN L-Cysteinamide, N-(1-oxo-13,13,13-triphenyl-3,6,9-trioxa-12-thiatridec-1-yl)glycyl-L-prolyl-L-homocysteinyl-L-isoleucyl-L-leucyl-L-leucyl-L-alanyl-L-arginyl-L-.alpha.-aspartyl-L-arginyl-, cyclic (3.fwdarw.11)-thioether (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

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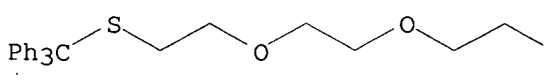

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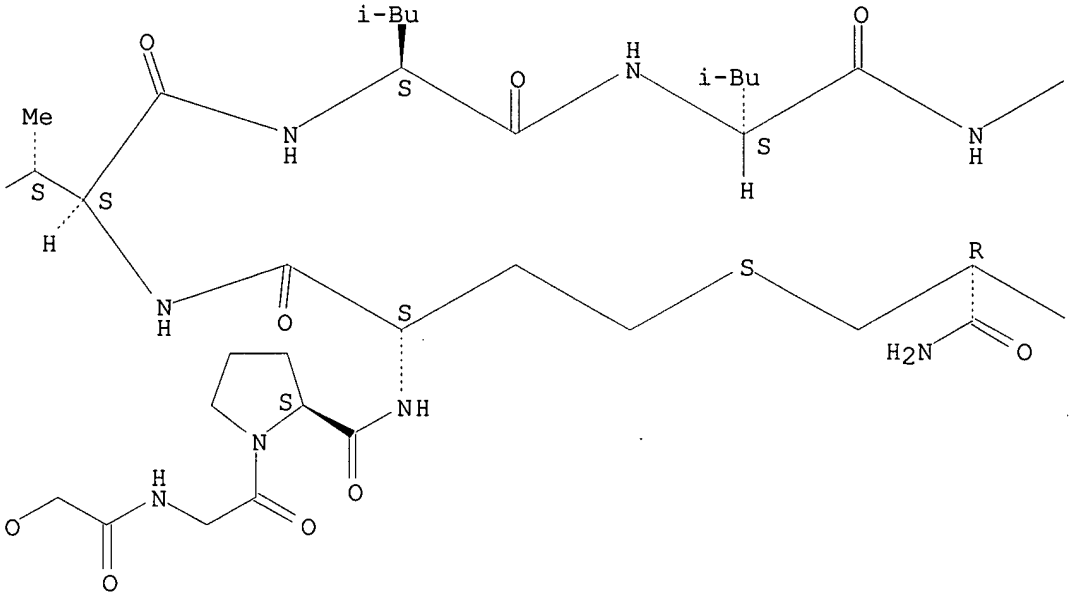
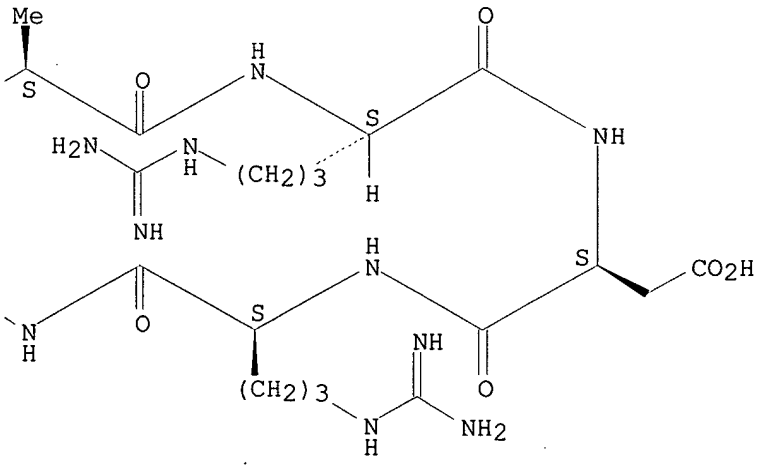


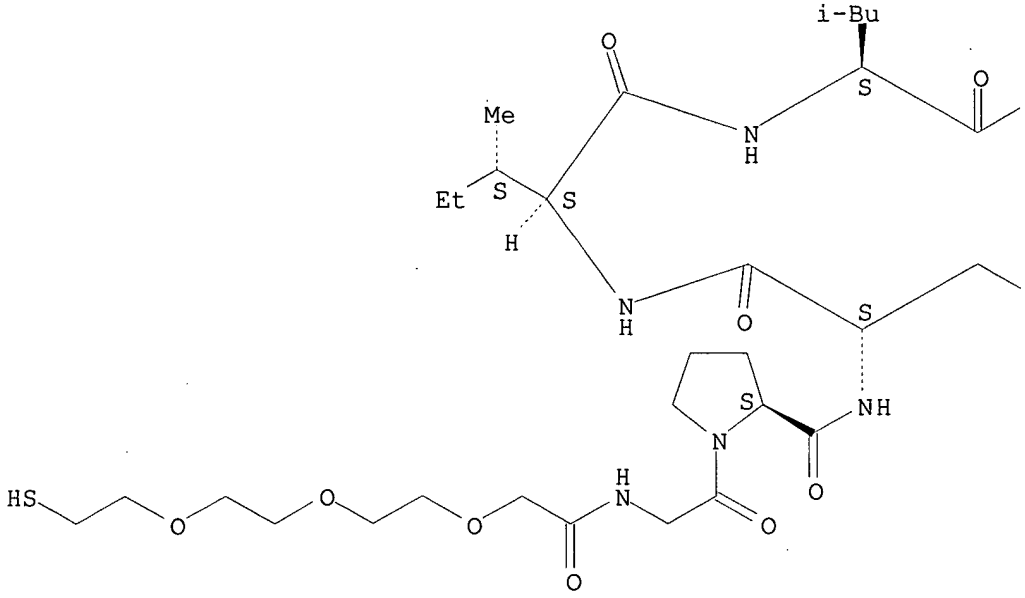
PAGE 1-C



RN 228403-77-8 HCAPLUS
CN L-Cysteinamide, N-[[2-[2-(2-mercaptoethoxy)ethoxy]ethoxy]acetyl]glycyl-L-prolyl-L-homocysteinyl-L-isoleucyl-L-leucyl-L-leucyl-L-alanyl-L-arginyl-L-.alpha.-aspartyl-L-arginyl-, cyclic (3.fwdarw.11)-thioether (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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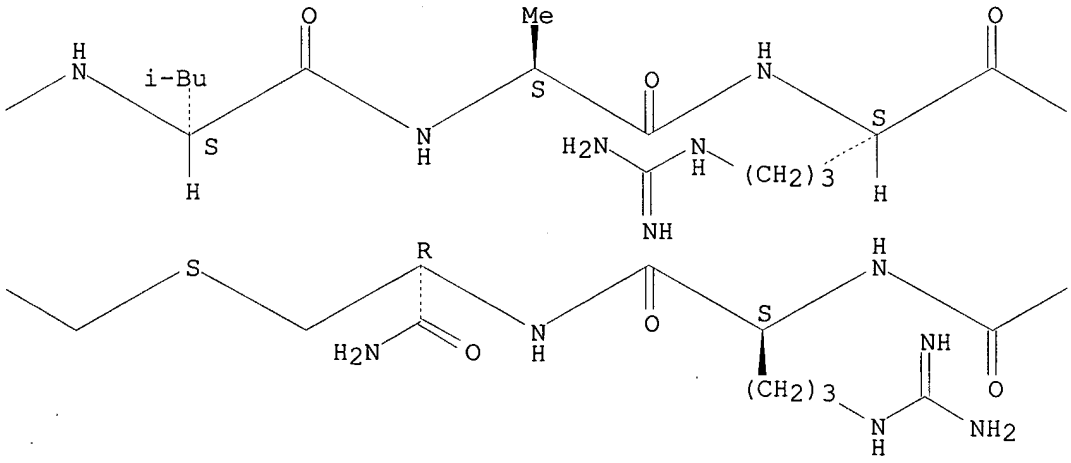
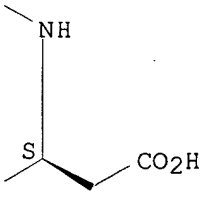
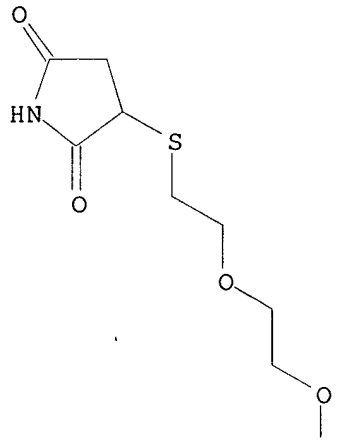


PAGE 1-C

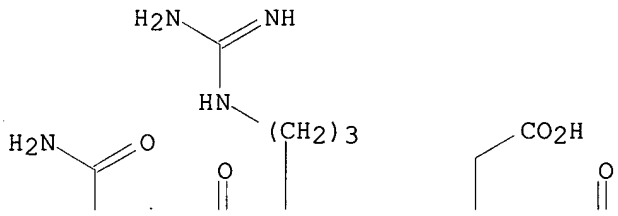


RN 228403-78-9 HCAPLUS
CN L-Cysteinamide, N-[[2-[2-[2-[(2,5-dioxo-3-pyrrolidinyl)thio]ethoxy]ethoxy]ethoxy]acetyl]glycyl-L-prolyl-L-homocysteinyl-L-isoleucyl-L-leucyl-L-leucyl-L-alanyl-2-methyl-L-prolyl-L-.alpha.-aspartyl-L-arginyl-, cyclic (3.fwdarw.11)-thioether (9CI) (CA INDEX NAME)

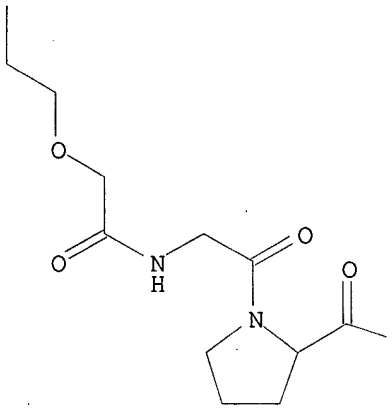
PAGE 1-A



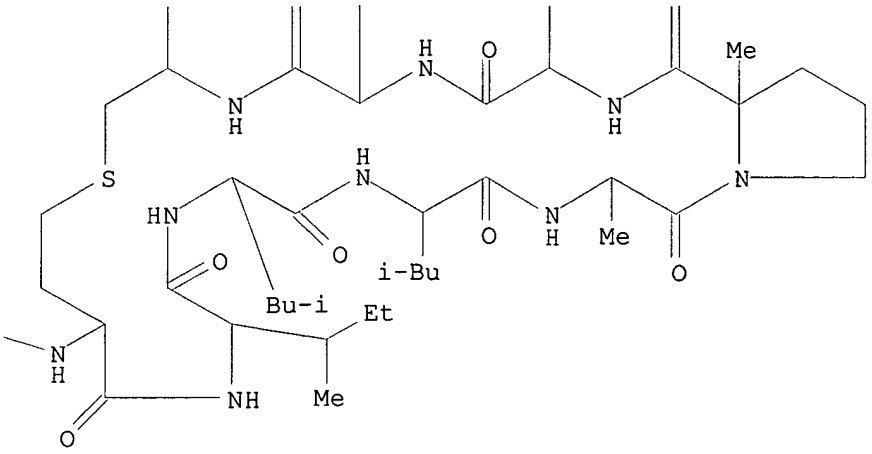
PAGE 1-B



PAGE 2-A



PAGE 2-B

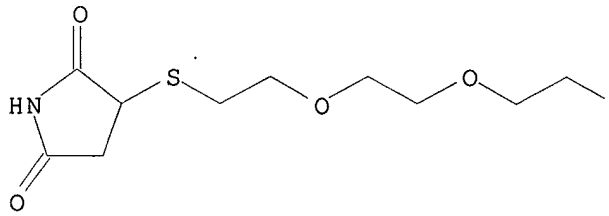


RN 228403-79-0 HCAPLUS
CN L-Cysteinamide, N-[[2-[2-[2-[(2,5-dioxo-3-pyrrolidinyl)thio]ethoxy]ethoxy]ethoxy]acetyl]glycyl-L-prolyl-L-homocysteinyl-L-isoleucyl-L-leucyl-L-leucyl-L-alanyl-L-arginyl-L-.alpha.-aspartyl-L-arginyl-, cyclic (3.fwdarw.11)-thioether (9CI) (CA INDEX NAME)

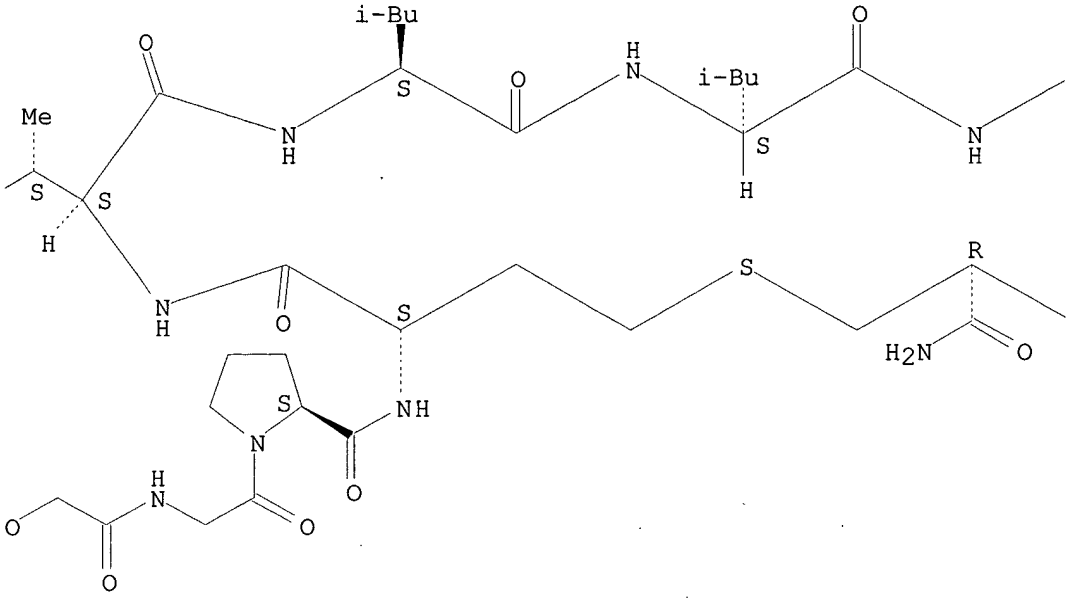
Absolute stereochemistry.

PAGE 1-A

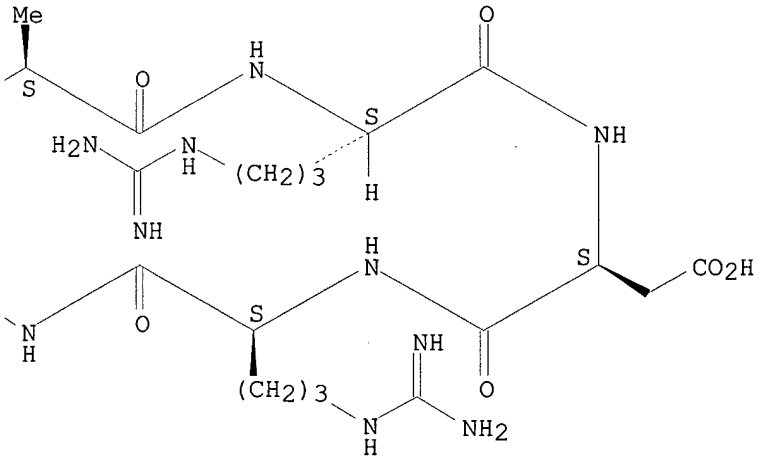
Et



PAGE 1-B



PAGE 1-C



REFERENCE COUNT: 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 20 OF 33 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1999:64698 HCAPLUS
DOCUMENT NUMBER: 130:139655
TITLE: Oligopeptide-Vinca alkaloid **conjugates** useful in the treatment of prostate cancer
INVENTOR(S): Brady, Stephen F.; Garsky, Victor M.; Pawluczyk, Joseph M.
PATENT ASSIGNEE(S): Merck & Co., Inc., USA

SOURCE: PCT Int. Appl., 101 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9902175	A1	19990121	WO 1998-US14413	19980709
W: AL, AM, AU, AZ, BA, BB, BG, BR, BY, CA, CN, CU, CZ, EE, GE, HR, HU, ID, IL, IS, JP, KG, KR, KZ, LC, LK, LR, LT, LV, MD, MG, MK, MN, MX, NO, NZ, PL, RO, RU, SG, SI, SK, SL, TJ, TM, TR, TT, UA, US, UZ, VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 9883960	A1	19990208	AU 1998-83960	19980709
AU 740597	B2	20011108		
EP 1009420	A1	20000621	EP 1998-934444	19980709
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, FI				
US 6127333	A	20001003	US 1998-112656	19980709
JP 2002510325	T2	20020402	JP 1999-509003	19980709

PRIORITY APPLN. INFO.: US 1997-52195P P 19970710
GB 1998-10183 A 19980513
WO 1998-US14413 W 19980709

OTHER SOURCE(S): MARPAT 130:139655

AB Chem. **conjugates** which comprise oligopeptides, having amino acid sequences that are selectively proteolytically cleaved by free prostate-specific antigen (PSA) and known cytotoxic agents are disclosed. The **conjugates** of the invention are characterized by a diamine **linker** between the oligopeptide and vinblastine. Such **conjugates** are useful in the treatment of prostatic cancer and benign prostatic hypertrophy (BPH).

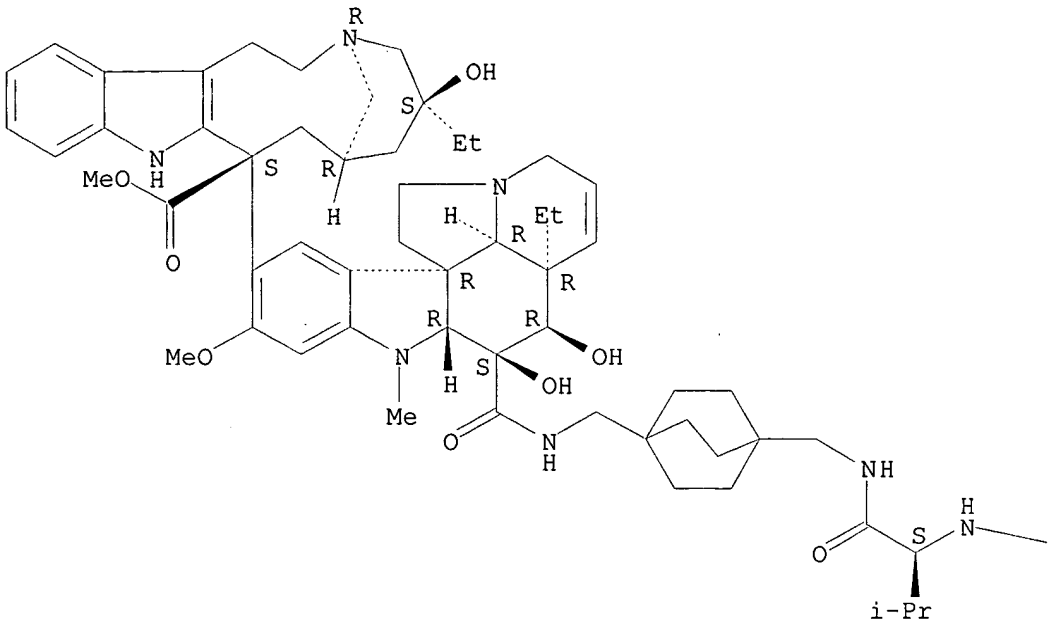
IT **219996-38-0P**
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); PNU (Preparation, unclassified); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)
(oligopeptide-Vinca alkaloid **conjugates** useful in the treatment of prostate cancer)

RN 219996-38-0 HCAPLUS

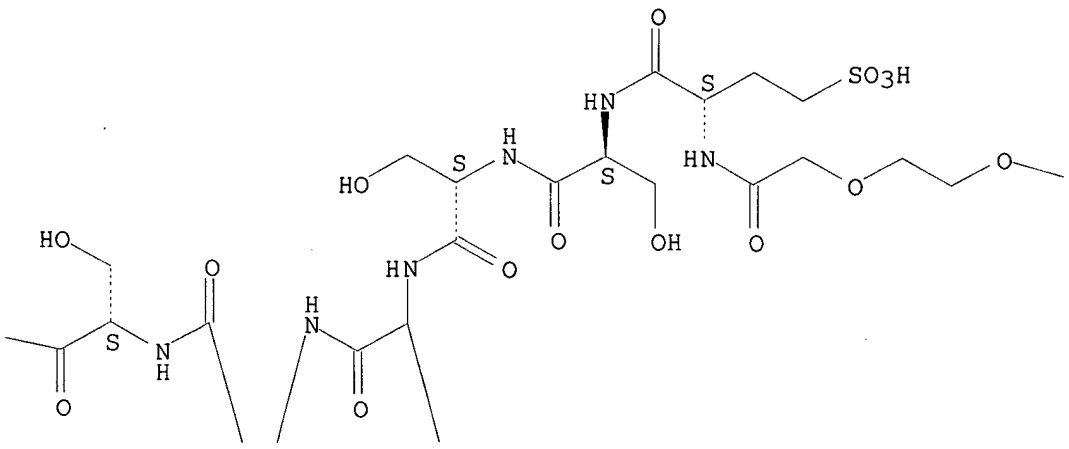
CN Vincaleukoblastin-23-oic acid, O4-deacetyl-, 7-amide with (2S)-2-[[[2-(2-methoxyethoxy)ethoxy]acetyl]amino]-4-sulfobutanoyl-L-seryl-L-seryl-2-cyclohexylglycyl-L-glutaminyl-L-seryl-N-[[4-(aminomethyl)bicyclo[2.2.2]oct-1-yl]methyl]-L-valinamide (9CI) (CA INDEX NAME)

Absolute stereochemistry.

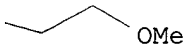
PAGE 1-A



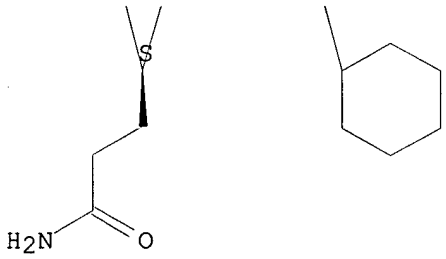
PAGE 1-B



PAGE 1-C



PAGE 2-B



REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 21 OF 33 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1998:789057 HCAPLUS
DOCUMENT NUMBER: 130:43405
TITLE: Peptide-coated implants and methods for producing them
INVENTOR(S): Kessler, Horst; Finsinger, Dirk; Jonczyk, Alfred; Meyer, Joerg; Nies, Berthold; Kantlehner, Martin
PATENT ASSIGNEE(S): Merck Patent G.m.b.H., Germany
SOURCE: PCT Int. Appl., 64 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9852619	A2	19981126	WO 1998-EP2753	19980509
WO 9852619	A3	19990318		

W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES,

FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG

DE 19755801	A1	20000621	DE 1997-19755801	19971216
DE 19818098	A1	19991104	DE 1998-19818098	19980423
EP 983095	A2	20000308	EP 1998-925574	19980509
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, SI, LT, LV, FI				
JP 2001526570	T2	20011218	JP 1998-549890	19980509
AU 743878	B2	20020207	AU 1998-77638	19980509
ZA 9804334	A	19990128	ZA 1998-4334	19980521
US 6280760	B1	20010828	US 1999-423347	19991122

PRIORITY APPLN. INFO.:
DE 1997-19721352 A 19970522
DE 1997-19755801 A 19971216
DE 1998-19818098 A 19980423
WO 1998-EP2753 W 19980509

AB Biomaterials, in particular implants, are functionalized by covering them with a coating of synthetic cell- or tissue-selective RGD peptides which primarily stimulate in vitro the adhesion of cell types intended to ensure the tissue integration of the biomaterial. Different parts of the surface of an implant may be coated with different cell adhesion-promoting peptides to accomplish self-organization of biohybrid organs by targeted activation of various cell types in different regions of the implant surface. The peptides comprise an adhesion sequence-contg. domain, a **spacer** to provide adequate steric conditions for cell adhesion, a mol. anchoring moiety for attachment of the peptide deriv. to the biomaterial or implant surface, and optionally a dendrimer moiety bearing the adhesion peptides to increase the no. of binding sites for cell adhesion. Thus, a polystyrene cell culture surface was pretreated with bovine serum albumin and then coated with the integrin .alpha.v.beta.3-selective thiol peptide p-maleimidophenyl 4-sulfosuccinimidylbutyrate. This coating provided a strong, dose-dependent stimulation of adhesion of cultured mouse MC3T3 H1 osteoblasts.

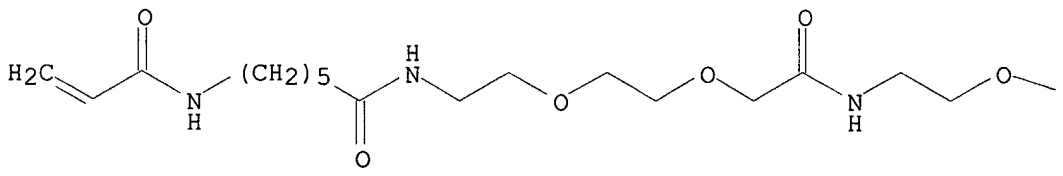
IT **216455-65-1P 216455-66-2P 216455-68-4P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(peptide-coated implants and methods for producing them)

RN 216455-65-1 HCAPLUS

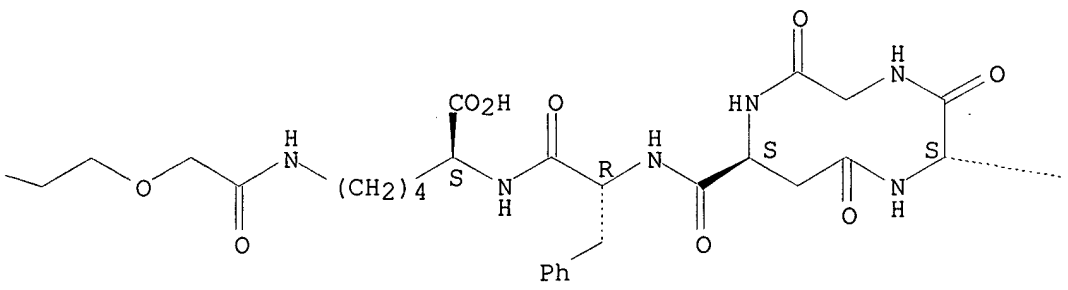
CN L-Lysine, L-arginylglycyl-L-.alpha.-aspartyl-D-phenylalanyl-N6-(1,10,19,26-tetraoxo-3,6,12,15-tetraoxa-9,18,25-triazaoctacos-27-en-1-yl)-, (3.fwdarw.1)-lactam (9CI) (CA INDEX NAME)

Absolute stereochemistry.

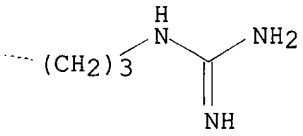
PAGE 1-A



PAGE 1-B



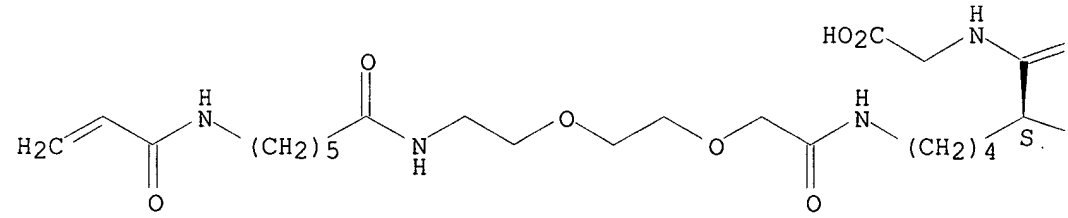
PAGE 1-C



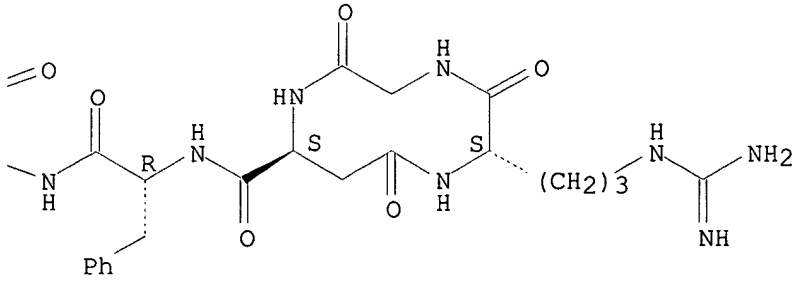
RN 216455-66-2 HCAPLUS
CN Glycine, L-arginylglycyl-L-.alpha.-aspartyl-D-phenylalanyl-N6-(1,10,17-trioxo-3,6-dioxa-9,16-diazanonadec-18-en-1-yl)-L-lysyl-, (3.fwdarw.1)-lactam (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



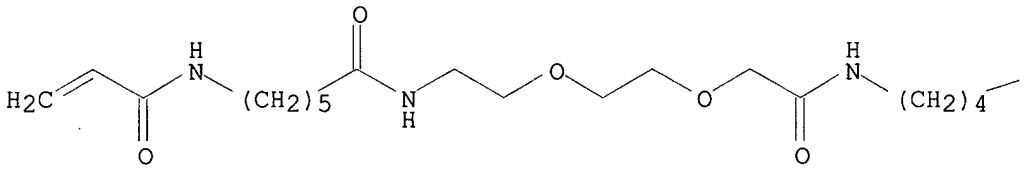
PAGE 1-B



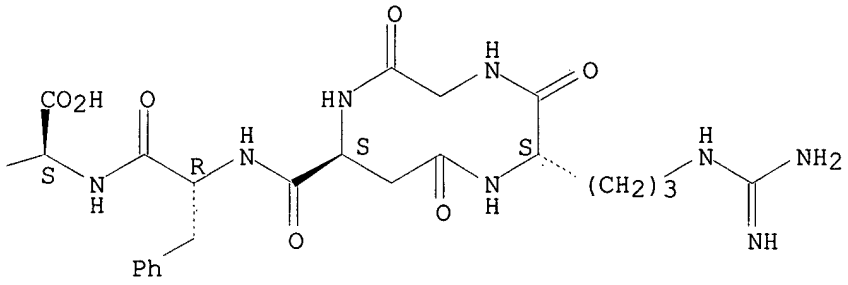
RN 216455-68-4 HCAPLUS
CN L-Lysine, L-arginylglycyl-L-.alpha.-aspartyl-D-phenylalanyl-N6-(1,10,17-trioxo-3,6-dioxa-9,16-diazanonadec-18-en-1-yl)-, (3.fwdarw.1)-lactam (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



L6 ANSWER 22 OF 33 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1998:627617 HCAPLUS
DOCUMENT NUMBER: 130:7374
TITLE: Camptothecin delivery systems. Enhanced efficacy and tumor accumulation of camptothecin following its **conjugation** to polyethylene glycol via a glycine **linker**
AUTHOR(S): Conover, Charles D.; Greenwald, Richard B.; Pendri, Annapurna; Gilbert, Karl W.; Shum, Kwok L.
CORPORATE SOURCE: Research Development, Enzon Inc., Piscataway, NJ, 08854, USA

SOURCE: Cancer Chemotherapy and Pharmacology (1998), 42(5), 407-414
CODEN: CCPHDZ; ISSN: 0344-5704
PUBLISHER: Springer-Verlag
DOCUMENT TYPE: Journal
LANGUAGE: English

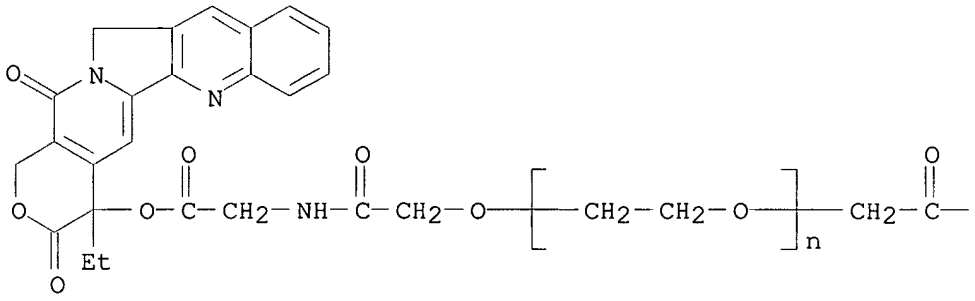
AB The circulatory retention, antitumor activity, and tissue biodistribution of polyethylene glycol(PEG)-**conjugated** camptothecin-20-O-glycinate, PEG-.beta.-camptothecin (PEG-.beta.-CAPT), was assessed. Circulatory retention studies were performed in mice injected i.v. with 875 mg/kg of PEG-.beta.-CAPT. Antitumor activity was evaluated both i.p. and i.v. in mouse xenograft models. Biodistribution studies were performed in mice bearing colorectal carcinoma xenografts with 3H-labeled PEG-.beta.-CAPT and CAPT injected i.v. PEG-.beta.-CAPT had a blood t1/2.alpha. of 6 min and a t1/2.beta. of 10.2 h. Antitumor activity was seen in all treated xenograft models. PEG-.beta.-CAPT in saline provided more available labeled CAPT in the circulation than unconjugated CAPT dissolved in intralipid. More labeled CAPT accumulated in solid tumors when delivered in the PEG-.beta.-CAPT form, with greater preference for tumor tissue than normal tissue.

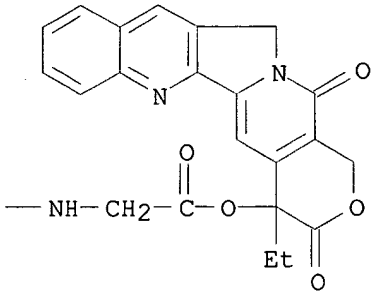
IT **182064-91-1P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(enhanced efficacy and tumor accumulation of camptothecin following **conjugation** to polyethylene glycol)

RN 182064-91-1 HCAPLUS

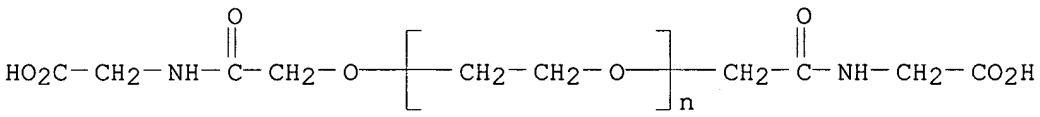
CN Poly(oxy-1,2-ethanediyl), .alpha.-[2-[[2-[[(4S)-4-ethyl-3,4,12,14-tetrahydro-3,14-dioxo-1H-pyrano[3',4':6,7]indolizino[1,2-b]quinolin-4-yl]oxy]-2-oxoethyl]amino]-2-oxoethyl]-.omega.-[2-[[2-[[(4S)-4-ethyl-3,4,12,14-tetrahydro-3,14-dioxo-1H-pyrano[3',4':6,7]indolizino[1,2-b]quinolin-4-yl]oxy]-2-oxoethyl]amino]-2-oxoethoxy]- (9CI) (CA INDEX NAME)

PAGE 1-A





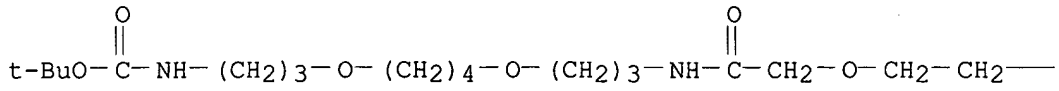
IT **182064-90-0**
RL: RCT (Reactant); RACT (Reactant or reagent)
(enhanced efficacy and tumor accumulation of camptothecin following **conjugation** to polyethylene glycol)
RN 182064-90-0 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), .alpha.-[2-[(carboxymethyl)amino]-2-oxoethyl]-.omega.-[2-[(carboxymethyl)amino]-2-oxoethoxy]- (9CI) (CA INDEX NAME)



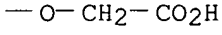
REFERENCE COUNT: 34 THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 23 OF 33 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1998:127073 HCAPLUS
DOCUMENT NUMBER: 128:230202
TITLE: Heterobifunctional Cross-Linkers Containing 4,9-Dioxa-1,12-dodecanediamine Spacers. [Erratum to document cited in CA126:317301]
AUTHOR(S): Johnson, Gary M.; Albarella, James P.; Petry, Christoph
CORPORATE SOURCE: Organic Chemistry Group, Bayer Corporation, Elkhart, IN, 46515, USA
SOURCE: Bioconjugate Chemistry (1998), 9(2), 304
CODEN: BCCHES; ISSN: 1043-1802
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Structure 3 in Table 1 is cor. The description of the prepn. of Compd. 1a is modified.
IT **189339-87-5P 189339-98-8P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of heterobifunctional crosslinkers contg. dioxadodecanediamine spacers for enzyme-antibody **conjugates** (Erratum))
RN 189339-87-5 HCAPLUS
CN 6,11,18,21-Tetraoxa-2,15-diazatricosanedioic acid, 16-oxo-, 1-(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)

PAGE 1-A

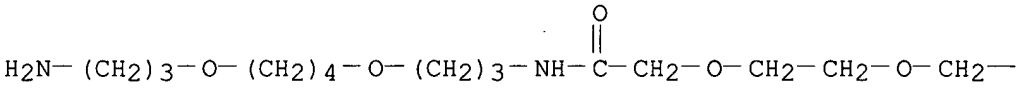


PAGE 1-B

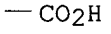


RN 189339-98-8 HCAPLUS
CN 3,6,13,18-Tetraoxa-9-azaheneicosanoic acid, 21-amino-8-oxo- (9CI) (CA INDEX NAME)

PAGE 1-A

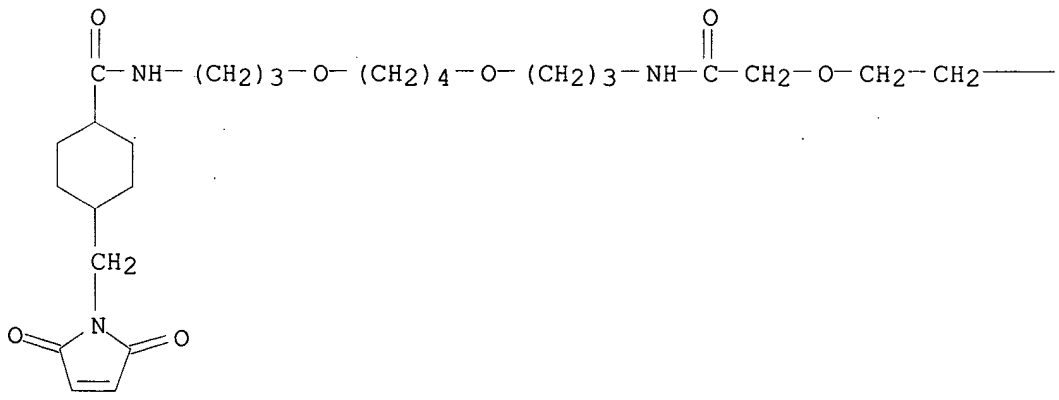


PAGE 1-B



IT **189340-11-2P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of heterobifunctional crosslinkers contg. dioxadodecanediamine spacers for enzyme-antibody **conjugates** (Erratum))
RN 189340-11-2 HCAPLUS
CN 6,11,18,21-Tetraoxa-2,15-diazatricosan-23-oic acid, 1-[4-[(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)methyl]cyclohexyl]-1,16-dioxo- (9CI) (CA INDEX NAME)

PAGE 1-A

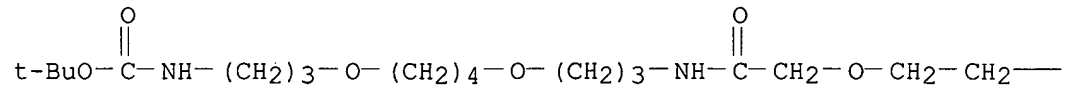


PAGE 1-B

—O—CH_2—CO_2H

L6 ANSWER 24 OF 33 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1997:299306 HCAPLUS
DOCUMENT NUMBER: 126:317301
TITLE: Heterobifunctional Cross-Linkers Containing 4,9-Dioxa-1,12-dodecanediamine Spacers
AUTHOR(S): Johnson, Gary M.; Albarella, James P.; Petry, Christoph
CORPORATE SOURCE: Organic Chemistry Group, Bayer Corporation, Elkhart, IN, 46515, USA
SOURCE: Bioconjugate Chem. (1997), 8(3), 447-452
CODEN: BCCHES; ISSN: 1043-1802
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
AB A series of heterobifunctional **linker** arms, e.g. RNH(CH2)3O(CH2)4O(CH2)2NHR1 [I; R = 4-(N-maleimidomethyl)cyclohexane-1-carbonyl, 3-(2-pyridyldithio)propionyl; R1 = COCH2OCH2CO2H, COCH2OCH2CH2OCH2CO2H, CO(CH2)6CO2H, CO(CH2)6CONHNH2] has been prepd. by functionalization of I (R = Me3CO2C, R1 = H) with anhydrides or acid chlorides. **Linker** I [R = 4-(N-maleimidomethyl)cyclohexane-1-carbonyl, R1 = CO(CH2)6CONHNH2] was used to prep. fully functional antibody-alk. phosphatase **conjugates**.
IT **189339-87-5P 189339-98-8P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. of heterobifunctional crosslinkers contg. dioxadodecanediamine spacers for enzyme-antibody **conjugates**)
RN 189339-87-5 HCAPLUS
CN 6,11,18,21-Tetraoxa-2,15-diazatricosanedioic acid, 16-oxo-, 1-(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)

PAGE 1-A

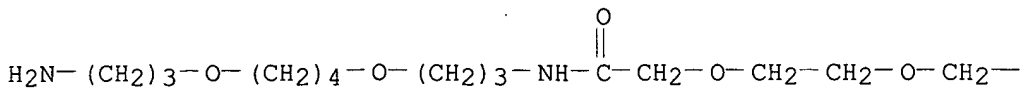


PAGE 1-B

—O—CH_2—CO_2H

RN 189339-98-8 HCAPLUS
CN 3,6,13,18-Tetraoxa-9-azaheneicosanoic acid, 21-amino-8-oxo- (9CI) (CA INDEX NAME)

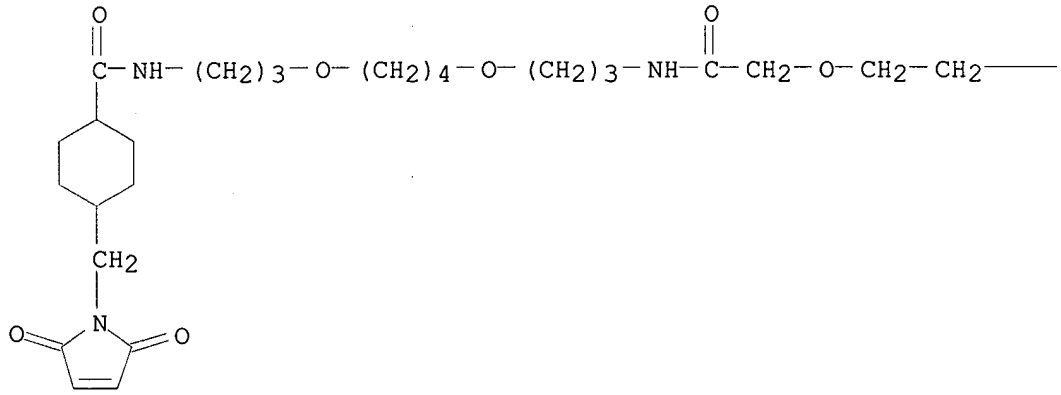
PAGE 1-A



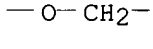
PAGE 1-B

IT **189340-11-2P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of heterobifunctional crosslinkers contg. dioxadodecanediamine spacers for enzyme-antibody **conjugates**)
RN 189340-11-2 HCAPLUS
CN 6,11,18,21-Tetraoxa-2,15-diazatricosan-23-oic acid, 1-[4-[(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)methyl]cyclohexyl]-1,16-dioxo- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



L6 ANSWER 25 OF 33 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1997:145226 HCAPLUS
DOCUMENT NUMBER: 126:139883
TITLE: Nonimmunogenic MHC-blocking peptides
INVENTOR(S): Wiley, Don C.; Bouvier, Marlene
PATENT ASSIGNEE(S): President and Fellows of Harvard College, USA; Wiley, Don C.; Bouvier, Marlene
SOURCE: PCT Int. Appl., 37 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9700084	A1	19970103	WO 1996-US10396	19960614

W: CA, JP, US
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE

PRIORITY APPLN. INFO.: US 1995-266P P 19950616

AB A synthetic MHC-blocking peptide of 8-10 residues designed to block the interaction of T-cell receptors with an MHC mol. is provided which is identical to an antigenic peptide of the T-cell receptor except that a **linker** is covalently bonded to a 1st and a 2nd amino acid residue of the peptide through side-chain functional groups on the amino acids to form a 20-200-membered ring. Potential uses include treatment of autoimmune diseases. The large, floppy nonpeptidic loop is favored to project out of the binding groove in such a way that the antigenic region of class I MHC complexes becomes inaccessible for recognition by T-cell receptors. The **linker** is preferably a bifunctional PEG deriv.; the amino acid residues bearing functional groups may be Lys, Orn, Glu, Asp, Ser, Thr, Tyr, or Cys. Alternatively, a MHC-blocking peptide is attached via side-chain functional groups to 1-3 chains which may comprise PEG chains. Thus, a resin-bound synthetic HTLV-1 Tax peptide (LLFKYPVKV) was cyclized via the lysine NH2 groups with PEG bis(carboxymethyl ether). The cyclic peptide formed a complex with HLA-A2 having Tm = 70.7-72.1.degree.; the PEG loop appeared to have no destabilizing effect on the structure of the class I MHC complex.

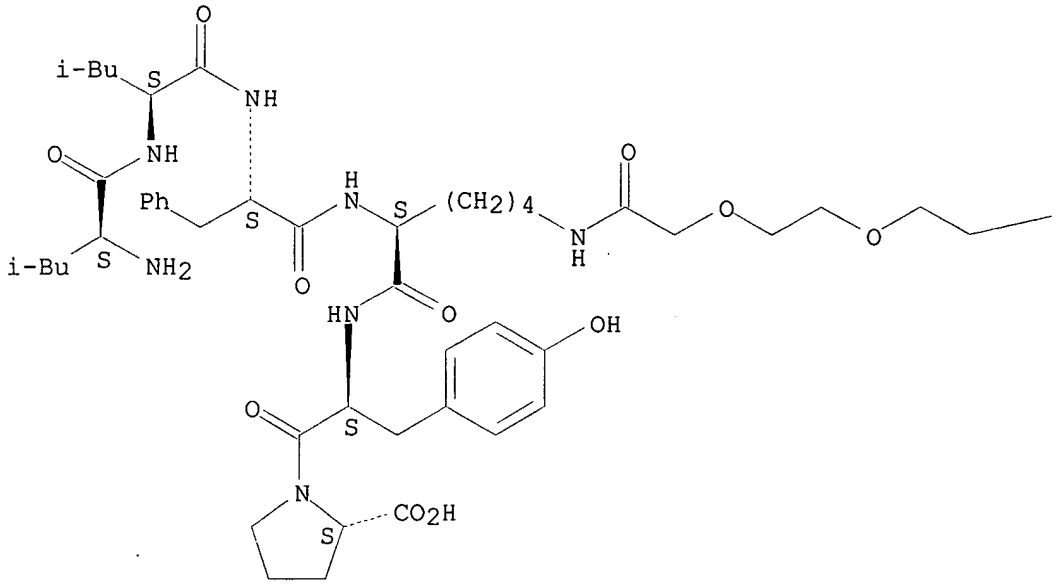
IT **186773-26-2P 186773-27-3P 186773-28-4P**
186773-29-5P 186773-30-8P 186773-31-9P
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)
(nonimmunogenic MHC-blocking peptides)

RN 186773-26-2 HCAPLUS

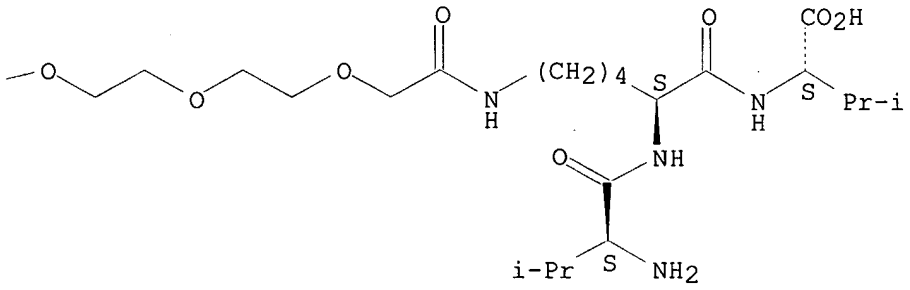
CN L-Proline, L-leucyl-L-leucyl-L-phenylalanyl-N6-(16-carboxy-1-oxo-3,6,9,12,15-pentaoxahexadec-1-yl)-L-lysyl-L-tyrosyl-, (4.fwdarw.2')-amide with L-valyl-L-lysyl-L-valine (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



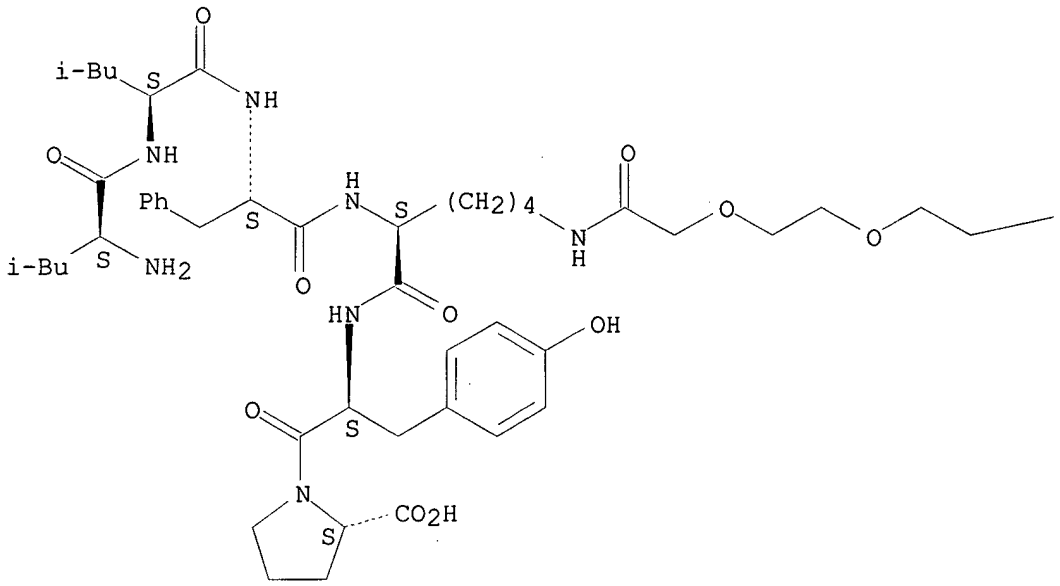
PAGE 1-B



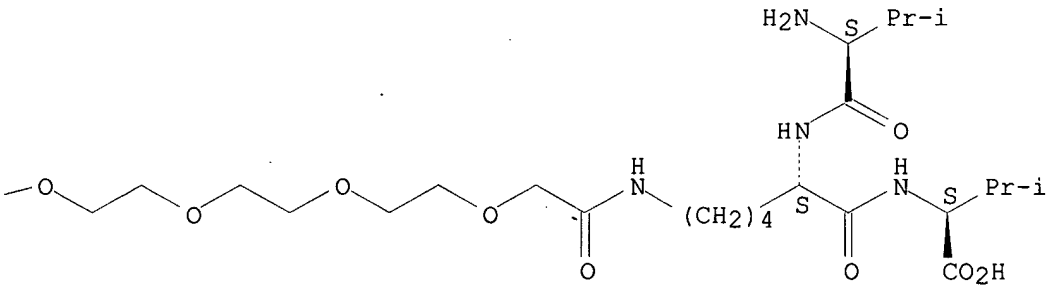
RN 186773-27-3 HCAPLUS
CN L-Proline, L-leucyl-L-leucyl-L-phenylalanyl-N6-(19-carboxy-1-oxo-3,6,9,12,15,18-hexaoxanonadec-1-yl)-L-lysyl-L-tyrosyl-, (4.fwdarw.2')-amide with L-valyl-L-lysyl-L-valine (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



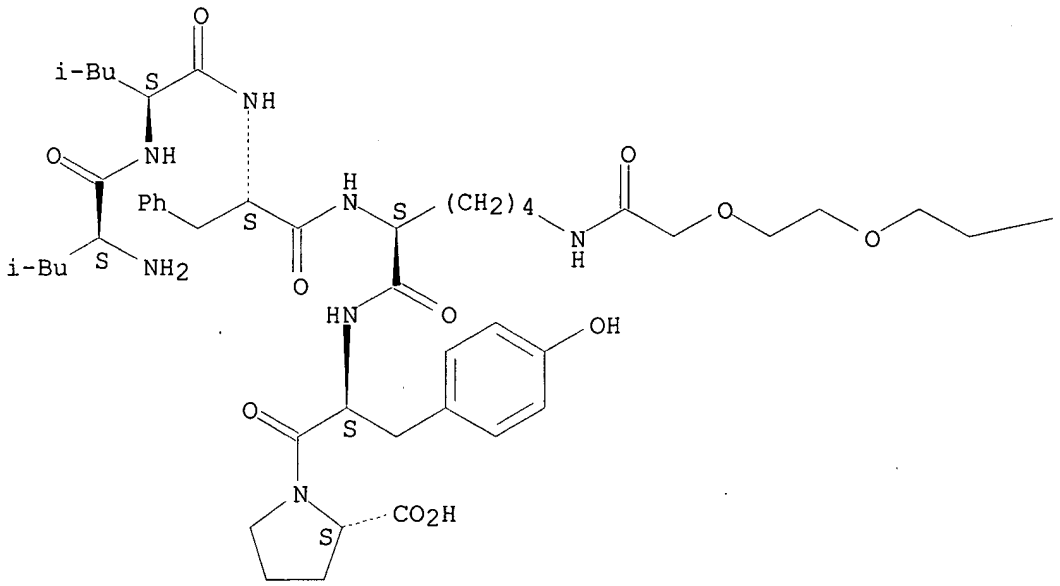
PAGE 1-B



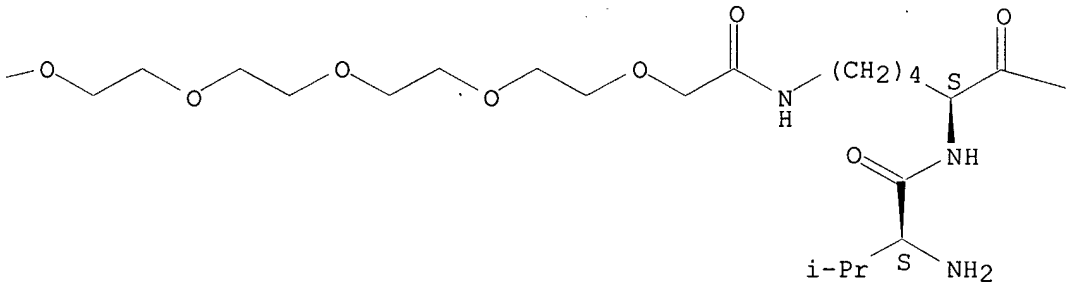
RN 186773-28-4 HCAPLUS
CN L-Proline, L-leucyl-L-leucyl-L-phenylalanyl-N6-(22-carboxy-1-oxo-3,6,9,12,15,18,21-heptaoxadocos-1-yl)-L-lysyl-L-tyrosyl-, (4.fwdarw.2')-amide with L-valyl-L-lysyl-L-valine (9CI) (CA INDEX NAME)

Absolute stereochemistry.

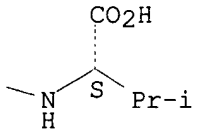
PAGE 1-A



PAGE 1-B



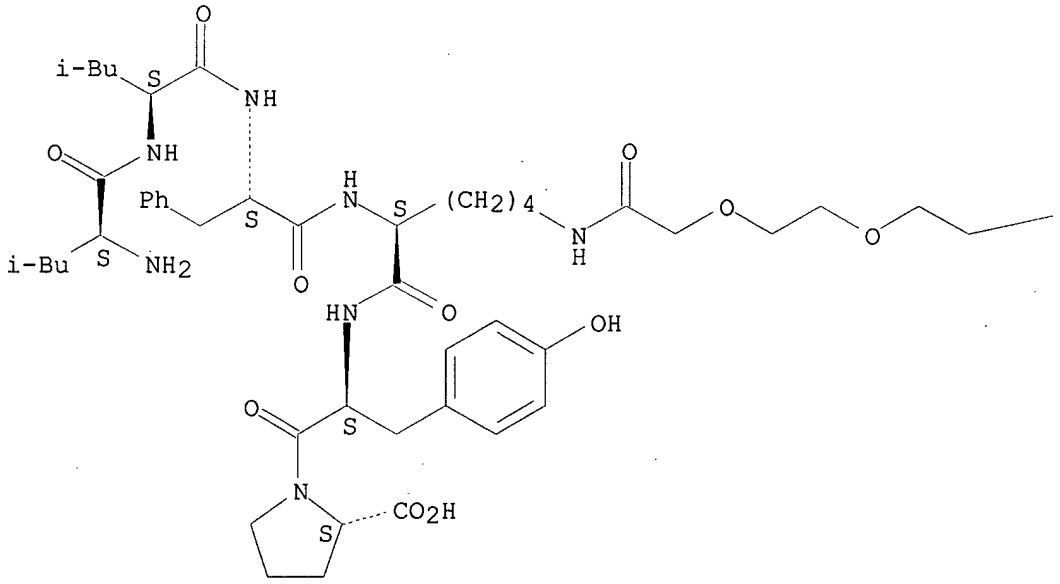
PAGE 1-C



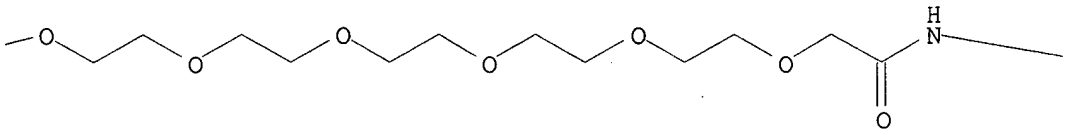
RN 186773-29-5 HCAPLUS
CN L-Proline, L-leucyl-L-leucyl-L-phenylalanyl-N6-(25-carboxy-1-oxo-3,6,9,12,15,18,21,24-octaoxapentacos-1-yl)-L-lysyl-L-tyrosyl-, (4.fwdarw.2')-amide with L-valyl-L-lysyl-L-valine (9CI) (CA INDEX NAME)

Absolute stereochemistry.

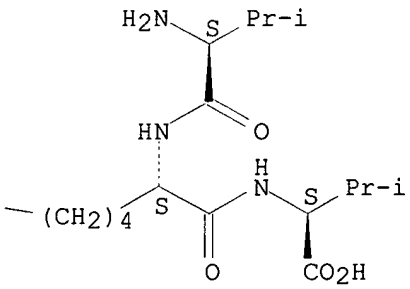
PAGE 1-A



PAGE 1-B



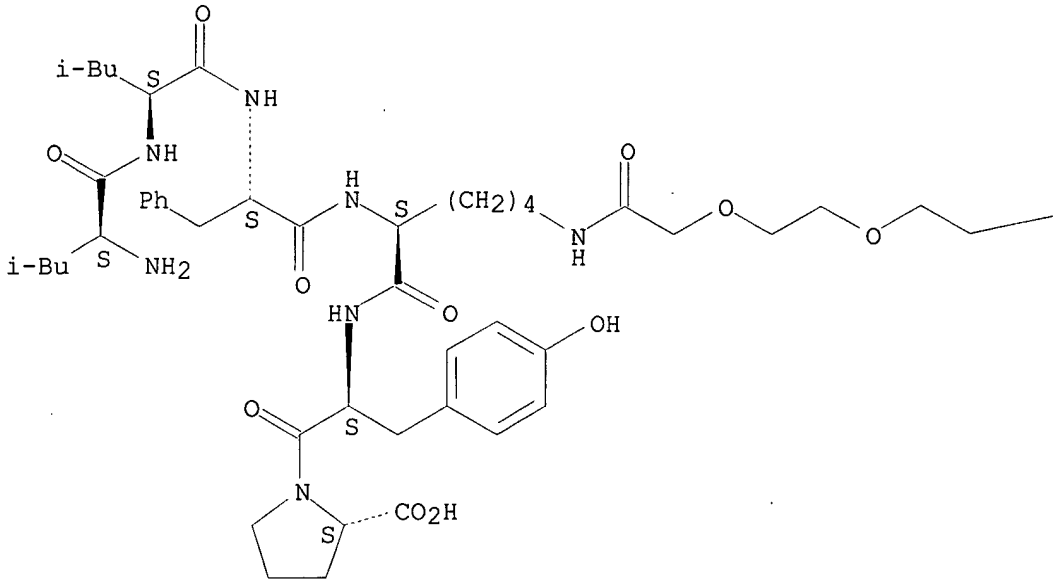
PAGE 1-C



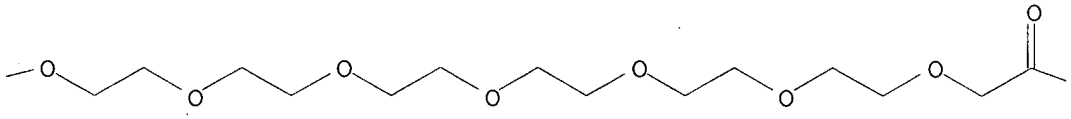
RN 186773-30-8 HCAPLUS
CN L-Proline, L-leucyl-L-leucyl-L-phenylalanyl-N6-(28-carboxy-1-oxo-3,6,9,12,15,18,21,24,27-nonaoxaoctacos-1-yl)-L-lysyl-L-tyrosyl-, (4.fwdarw.2')-amide with L-valyl-L-lysyl-L-valine (9CI) (CA INDEX NAME)

Absolute stereochemistry.

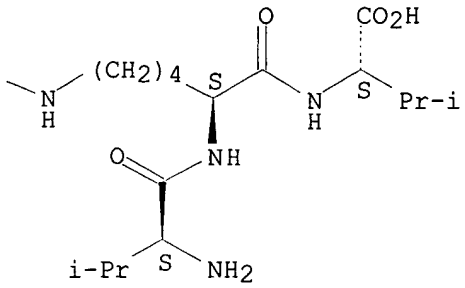
PAGE 1-A



PAGE 1-B



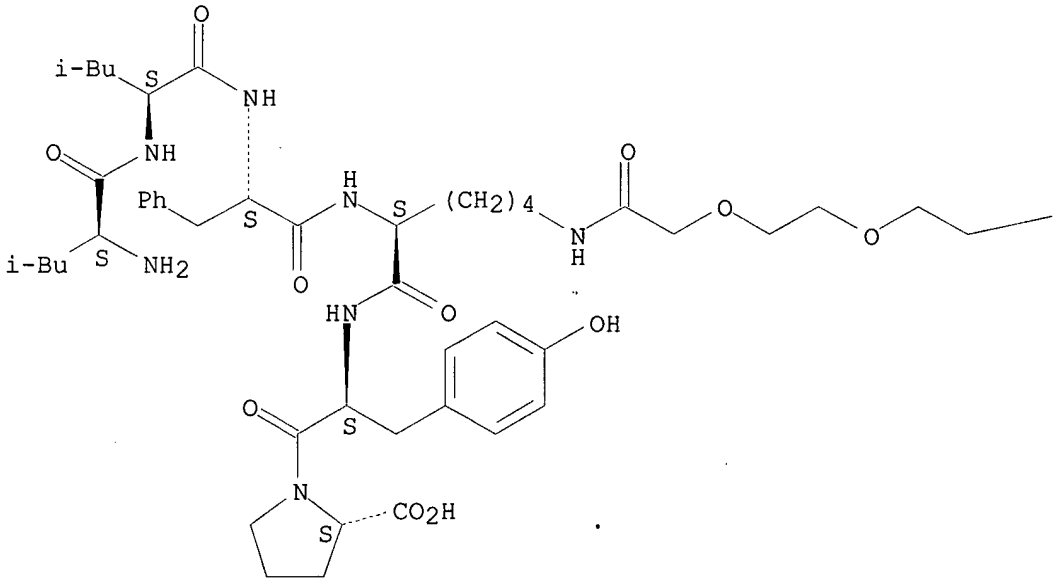
PAGE 1-C



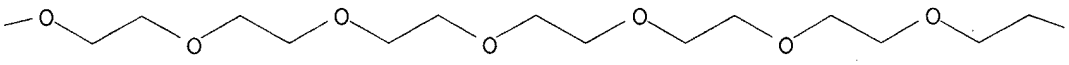
RN 186773-31-9 HCAPLUS
CN L-Proline, L-leucyl-L-leucyl-L-phenylalanyl-N6-(31-carboxy-1-oxo-3,6,9,12,15,18,21,24,27,30-decaoxatritriacont-1-yl)-L-lysyl-L-tyrosyl-, (4.fwdarw.2')-amide with L-valyl-L-lysyl-L-valine (9CI) (CA INDEX NAME)

Absolute stereochemistry.

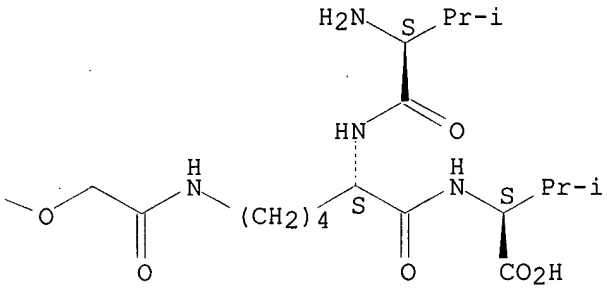
PAGE 1-A



PAGE 1-B



PAGE 1-C



L6 ANSWER 26 OF 33 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1996:145232 HCAPLUS
DOCUMENT NUMBER: 124:185293
TITLE: Synthesis of short polyoxyethylene-based heterobifunctional crosslinking reagents. Application to the coupling of peptides to liposomes
AUTHOR(S): Frisch, Benoit; Boeckler, Christophe; Schuber, Francis
CORPORATE SOURCE: Faculte de Pharmacie, Universite Louis Pasteur, Strasbourg-Illkirch, 67400, Fr.
SOURCE: Bioconjugate Chem. (1996), 7(2), 180-6
CODEN: BCCHES; ISSN: 1043-1802
DOCUMENT TYPE: Journal
LANGUAGE: English

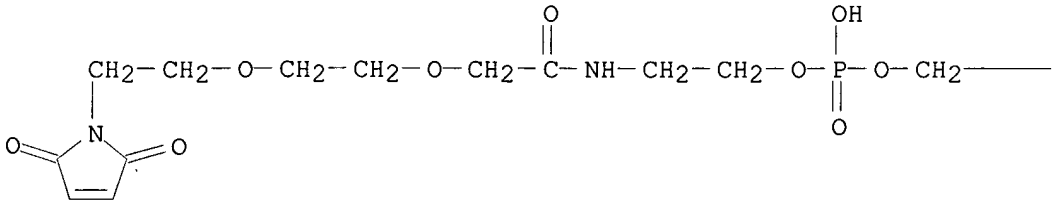
AB We describe the synthesis of 2-[2-[2-[(2-bromoacetyl)amino]ethoxy]ethoxy]e thoxy acetic acid, [2-[2-(2,5-dioxo-2,5-dihydropyrrol-1-yl)ethoxy]ethoxy] acetic acid, and [2-[2-(pyridin-2-yldisulfanyl)ethoxy]ethoxy] acetic acid, three new thiol-reactive heterobifunctional reagents, and the prepn. of their corresponding dipalmitoylphosphatidylethanolamine derivs. (I, II, and III, resp.). Such phospholipid amide derivs. were aimed to be incorporated into the bilayers of liposomal constructs used for immunization with e.g. synthetic peptides. The **spacer** arms introduced by I, II, and III are hydrophilic polyoxyethylene chains of variable lengths that were expected to provide a good accessibility to their **conjugates** and have a lesser intrinsic immunogenicity than the **spacer** introduced by N-[4-(p-maleimidophenyl)butyryl]phospha tidylethanolamine (MPB-PE), a classical reagent used for **conjugation** of ligands to the surface of liposomes. Such an immunogenicity might be prejudicial (e.g. carrier-induced epitopic suppression) to the development of synthetic vaccination formulations. Moreover, the derivs. I, II, and III allowed the coupling of peptides,

bearing a thiol function, to their liposomal carrier via two types of linkages, i.e. stable thio ether (I and II) and bioreducible disulfide (III) bonds; this might be of importance in the mechanism of antigen presentation by competent cells. Using CGIRGERA as a model peptide, the rate of coupling to I, II, and III was assessed as a function of pH.

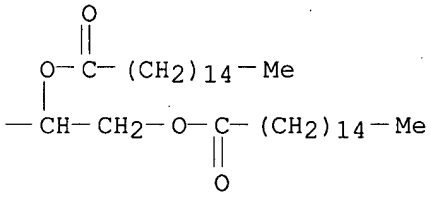
IT **163277-91-6P 163277-92-7P 163277-93-8P**
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(short polyoxyethylene-based heterobifunctional crosslinking reagents for coupling of peptides to liposomes)

RN 163277-91-6 HCAPLUS
CN Hexadecanoic acid, 1-[15-(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)-3-hydroxy-3-oxido-8-oxo-2,4,10,13-tetraoxa-7-aza-3-phosphapentadec-1-yl]-1,2-ethanediyl ester (9CI) (CA INDEX NAME)

PAGE 1-A

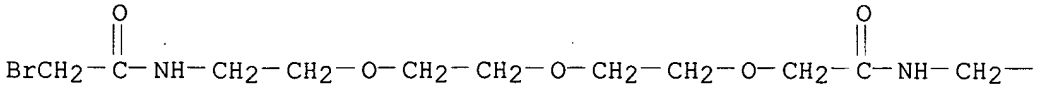


PAGE 1-B

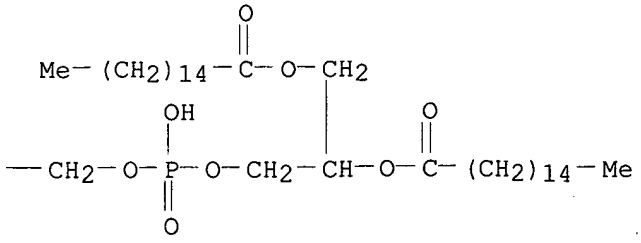


RN 163277-92-7 HCAPLUS
CN Hexadecanoic acid, 1-(21-bromo-3-hydroxy-3-oxido-8,20-dioxo-2,4,10,13,16-pentaoxa-7,19-diaza-3-phosphaheneicos-1-yl)-1,2-ethanediyl ester (9CI) (CA INDEX NAME)

PAGE 1-A

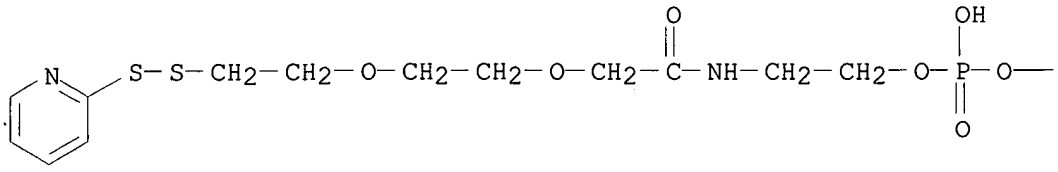


PAGE 1-B

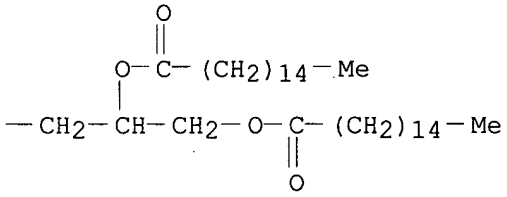


RN 163277-93-8 HCAPLUS
CN Hexadecanoic acid, 1-[3-hydroxy-3-oxido-8-oxo-15-(2-pyridinyldithio)-2,4,10,13-tetraoxa-7-aza-3-phosphapentadec-1-yl]-1,2-ethanediyl ester (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



L6 ANSWER 27 OF 33 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1996:61911 HCAPLUS
DOCUMENT NUMBER: 124:193182
TITLE: Targeted transfection of human hepatoma cells with a combination of lipospermine and neogalactolipids
AUTHOR(S): Kichler, Antoine; Remy, Jean-Serge; Behr, Jean-Paul; Schuber, Francis
CORPORATE SOURCE: Laboratoire de Chimie Bioorganique, Faculte de Pharmacie, Strasbourg-Illkirch, 67401, Fr.
SOURCE: J. Liposome Res. (1995), Volume Date 1995, 5(4), 735-45
CODEN: JLREE7; ISSN: 0898-2104
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Optimal in vitro gene delivery with (poly)cationic amphiphiles requires an excess of cationic charges with respect to DNA phosphates. We have developed targeted transfection systems based on elec. neutral lipospermine/DNA particles, to which synthetic tri-antennary

galactose ligands were **conjugated** to provide an interaction with cells, such as HepG2 cells, that express Gal/GalNAc receptors at their surface. Transfection, which was cell specific, increases .apprxeq. 1000-fold with 25% neogalactolipid, i.e. approaching the value obsd. with optimized pos. charged transfection complexes. Unexpectedly, neutral particles contg. thiol-reactive phospholipids, were also efficient gene delivery systems, although non-cell specific.

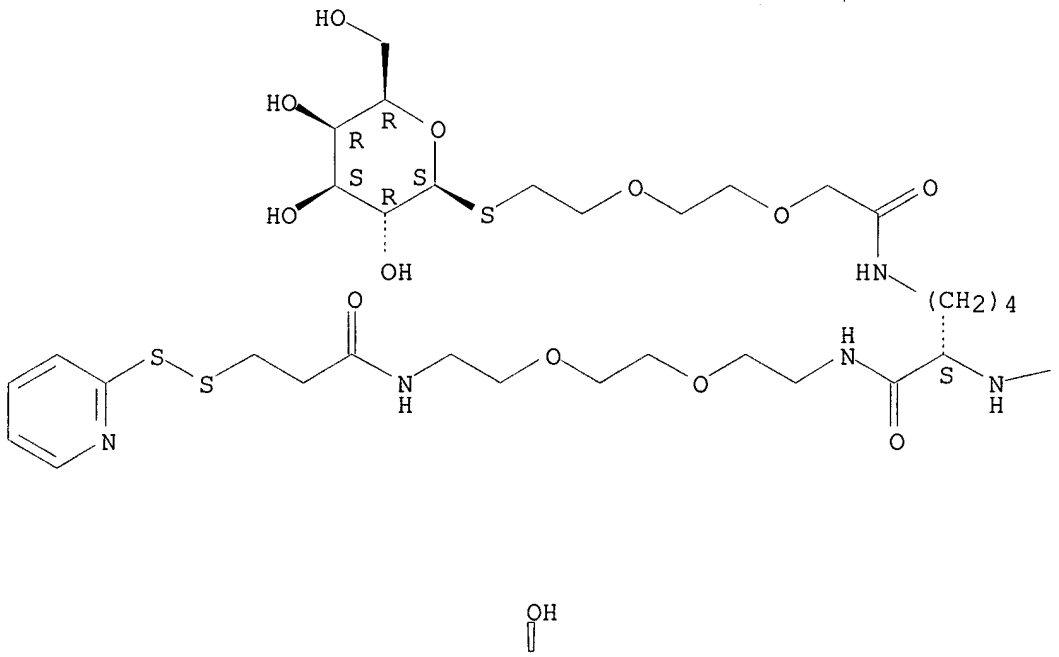
IT **162613-33-4 170304-72-0 173982-62-2**
RL: BPR (Biological process); BIOL (Biological study); PROC (Process)
(ligand; targeted transfection of human hepatoma cells with combination of lipospermine and neogalactolipids)

RN 162613-33-4 HCAPLUS

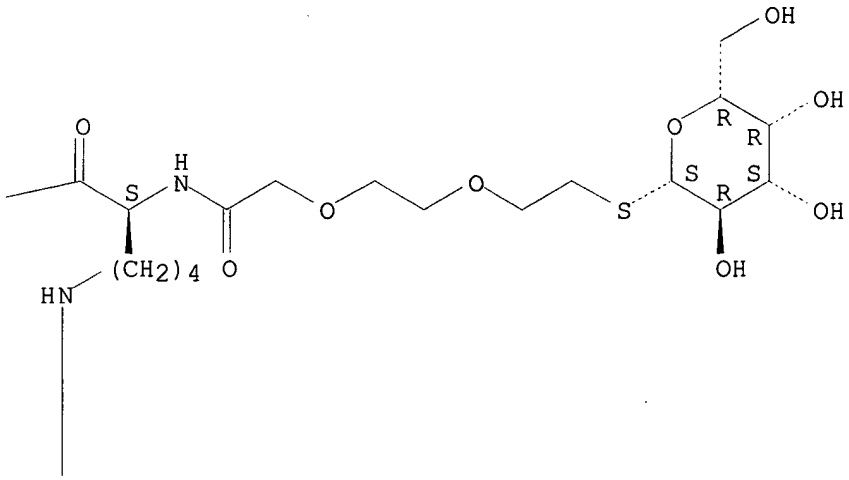
CN L-Lysinamide, N2,N6-bis[[2-[2-(.beta.-D-galactopyranosylthio)ethoxy]ethoxy]acetyl]-L-lysyl-N6-[[2-[2-(.beta.-D-galactopyranosylthio)ethoxy]ethoxy]acetyl]-N-[2-[2-[2-[[1-oxo-3-(2-pyridinyldithio)propyl]amino]ethoxy]ethoxy]ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

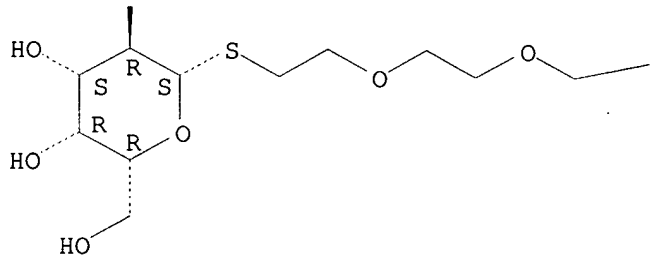
PAGE 1-A



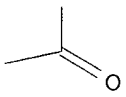
PAGE 1-B



PAGE 2-A



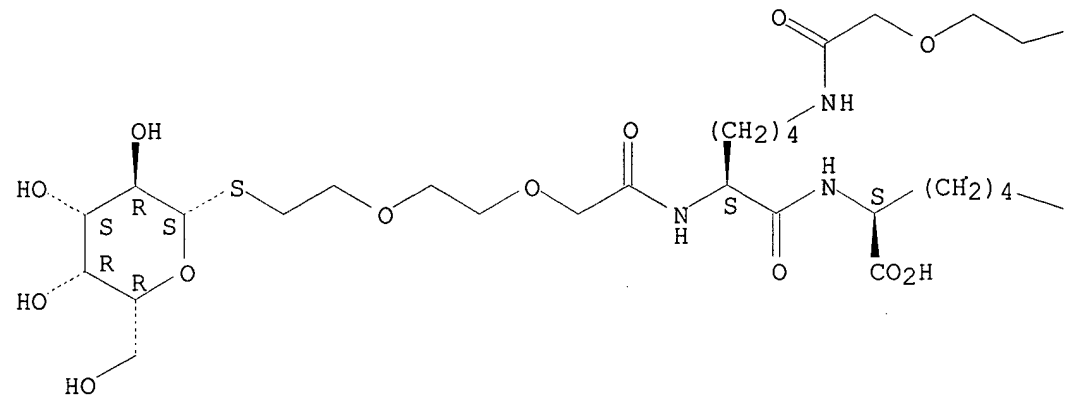
PAGE 2-B



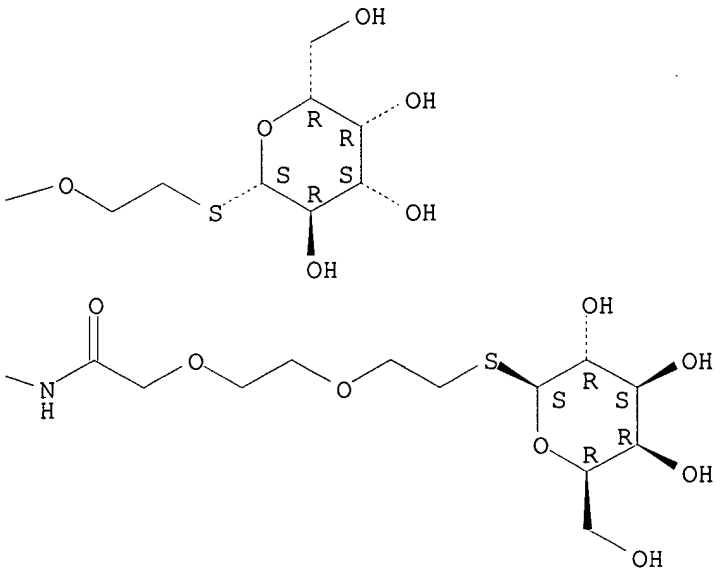
RN 170304-72-0 HCAPLUS
CN L-Lysine, N2,N6-bis[[2-[2-(.beta.-D-galactopyranosylthio)ethoxy]ethoxy]acetyl]-L-lysyl-N6-[[2-[2-(.beta.-D-galactopyranosylthio)ethoxy]ethoxy]acetyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



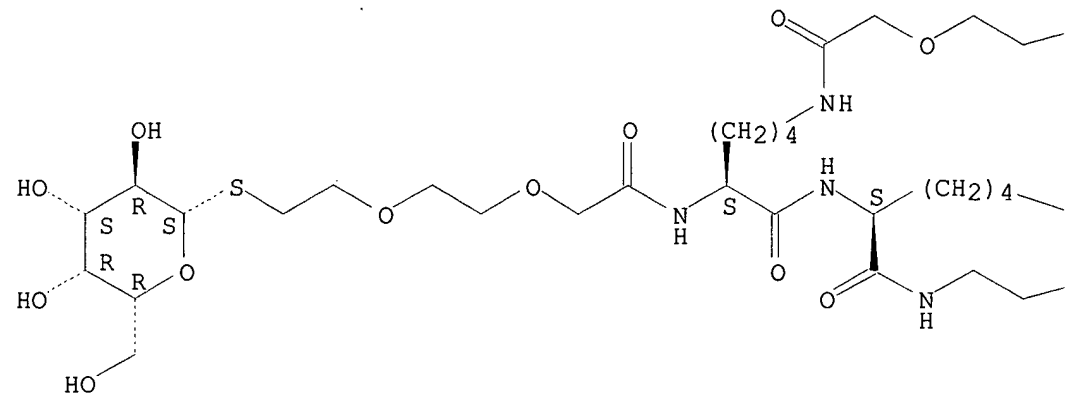
PAGE 1-B



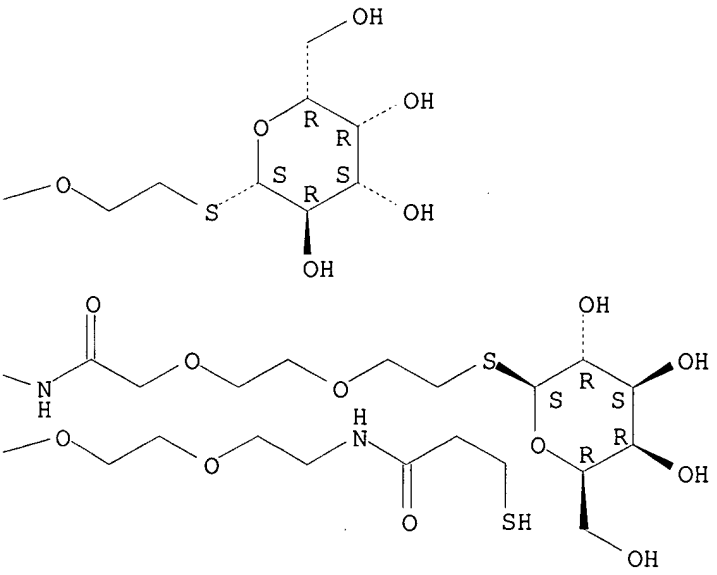
RN 173982-62-2 HCAPLUS
CN L-Lysinamide, N2,N6-bis[[2-[2-(.beta.-D-galactopyranosylthio)ethoxy]ethoxy]acetyl]-L-lysyl-N6-[[2-[2-(.beta.-D-galactopyranosylthio)ethoxy]ethoxy]acetyl]-N-[2-[2-[2-[(3-mercapto-1-oxopropyl)amino]ethoxy]ethoxy]ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



L6 ANSWER 28 OF 33 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1995:892833 HCAPLUS
DOCUMENT NUMBER: 123:314399
TITLE: Preparation of bisconjugates comprising two **oligosaccharide** sulfate and a **spacer** as antithrombotics
INVENTOR(S): Van Boeckel, Constant; Grootenhuis, Peter; Petitou, Maurice

PATENT ASSIGNEE(S): Akzo Nobel N.V., Neth.; Elf Sanofi
SOURCE: Eur. Pat. Appl., 49 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 649854	A1	19950426	EP 1994-202470	19940830
EP 649854	B1	20000315		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
AT 190619	E	20000415	AT 1994-202470	19940830
ES 2147216	T3	20000901	ES 1994-202470	19940830
CA 2131229	AA	19950302	CA 1994-2131229	19940831
FI 9404001	A	19950302	FI 1994-4001	19940831
NO 9403222	A	19950302	NO 1994-3222	19940831
AU 9471610	A1	19950316	AU 1994-71610	19940831
AU 679084	B2	19970619		
ZA 9406673	A	19950421	ZA 1994-6673	19940831
HU 69163	A2	19950828	HU 1994-2514	19940831
JP 07304787	A2	19951121	JP 1994-232003	19940901
US 5705489	A	19980106	US 1996-690449	19960805

PRIORITY APPLN. INFO.: EP 1993-202562 A 19930901
US 1994-299183 B1 19940831
OTHER SOURCE(S): MARPAT 123:314399
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB A tuneable bisconjugate comprising two saccharides and a **spacer** is prepd., wherein each **saccharide** is the same or different and comprises 2-6 **monosaccharide** units, at least one unit being uronic acid, and at least one of the **saccharide** to the other is connected through its non-reducing end by a **spacer** having the chain length of 20-120 atoms. At least one of the saccharides has antithrombotic activity, preferably affinity for antithrombin III (AT-III) and/or heparin cofactor II (HC-II) and/or has anti-factor IIa and/or anti-factor Xa activity, and preferably has the formula Q (R = H, OH, OSO3-, C1-8 alkoxy; R1 = OSO3-, NHSO3-; the wavy lines denote an upward or downward bond and the neg. charges are compensated by H or an alkali metal cation). A medicament for the treatment of prevention of thrombotic disorders or smooth muscle cell proliferation contains the said bisconjugate. A total of 15 bisconjugates, e.g., [Q1CO(CH2)5NHCOCH2CH2S]2, were prepd. It appears that the saccharides, the length of the **spacer**, and the combinations thereof can tune the anti-factor IIa/anti-factor Xa activity ratio.

IT **169751-08-0P 169751-09-1P**
RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of bisconjugates comprising two **oligosaccharide** sulfate and a **spacer** as antithrombotics)

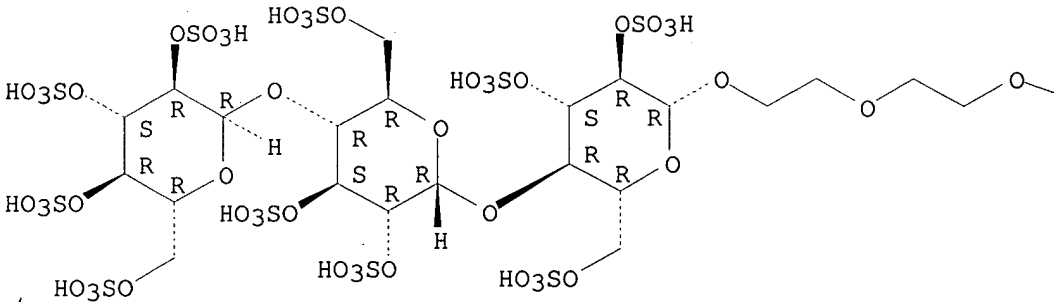
RN 169751-08-0 HCAPLUS

CN .alpha.-D-Glucopyranoside, methyl O-4-O-[13,29-dioxo-29-[[4-[1-oxo-19-[(O-2,3,4,6-tetra-O-sulfo-.alpha.-D-glucopyranosyl-(1.fwdarw.4)-O-2,3,6-tri-O-

sulfo-.alpha.-D-glucopyranosyl-(1.fwdarw.4)-2,3,6-tri-O-sulfo-.beta.-D-glucopyranosyl)oxy]-5,8,11,14,17-pentaoxa-2-azanonadec-1-yl]phenyl]amino]-2,3,6,9,15,18,21,24-heptaoxa-27-thia-12-azanonacos-1-yl]-2,3-di-O-methyl-6-O-sulfo-.alpha.-D-glucopyranosyl-(1.fwdarw.4)-O-2,3-di-O-methyl-.beta.-D-glucopyranuronosyl-(1.fwdarw.4)-O-2,3,6-tri-O-sulfo-.alpha.-D-glucopyranosyl-(1.fwdarw.4)-O-2,3-di-O-methyl-.alpha.-L-idopyranuronosyl-(1.fwdarw.4)-, 2,3,6-tris(hydrogen sulfate), nonadecasodium salt (9CI) (CA INDEX NAME)

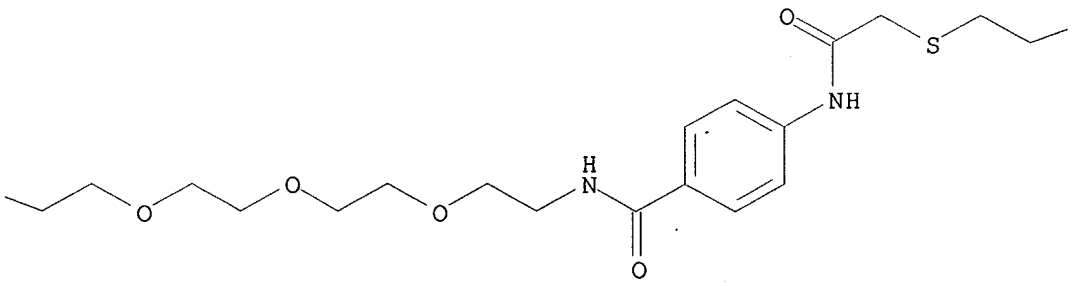
Absolute stereochemistry.

PAGE 1-A

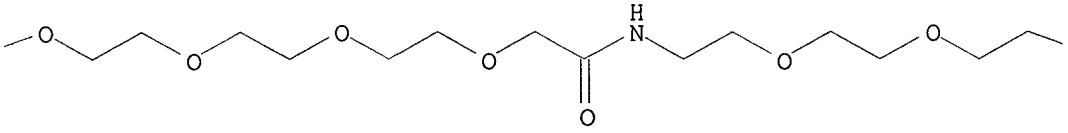


●19 Na

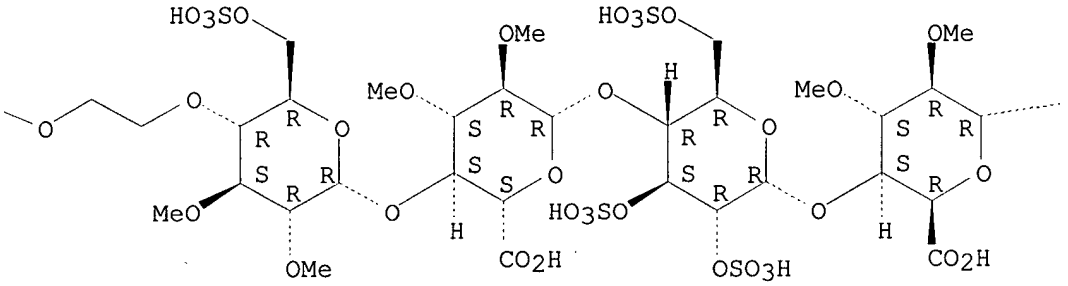
PAGE 1-B



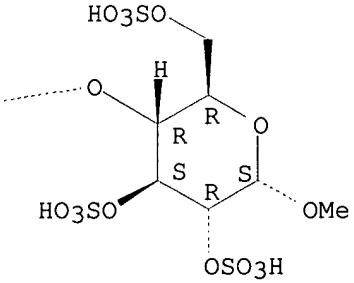
PAGE 1-C



PAGE 1-D



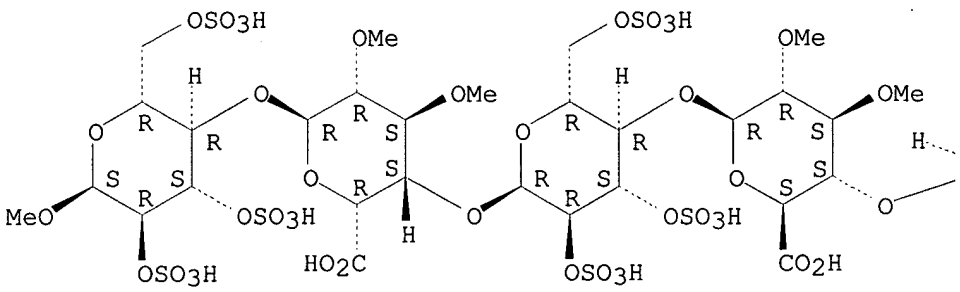
PAGE 1-E



RN 169751-09-1 HCAPLUS
CN .alpha.-D-Glucopyranoside, methyl O-4-O-[13,29-dioxo-29-[[4-[1-oxo-19-[[2,3,6-tri-O-sulfo-4-O-(2,3,4,6-tetra-O-sulfo-.beta.-D-glucopyranosyl)-.beta.-D-glucopyranosyl]oxy]-5,8,11,14,17-pentaoxa-2-azanonadec-1-yl]phenyl]amino]-3,6,9,15,18,21,24-heptaoxa-27-thia-12-azanonacos-1-yl]-2,3-di-O-methyl-6-O-sulfo-.alpha.-D-glucopyranosyl-(1.fwdarw.4)-O-2,3-di-O-methyl-.beta.-D-glucopyranuronosyl-(1.fwdarw.4)-O-2,3,6-tri-O-sulfo-.alpha.-D-glucopyranosyl-(1.fwdarw.4)-2,3-di-O-methyl-.alpha.-L-idopyranuronosyl-(1.fwdarw.4)-, 2,3,6-tris(hydrogen sulfate), hexadecasodium salt (9CI) (CA INDEX NAME)

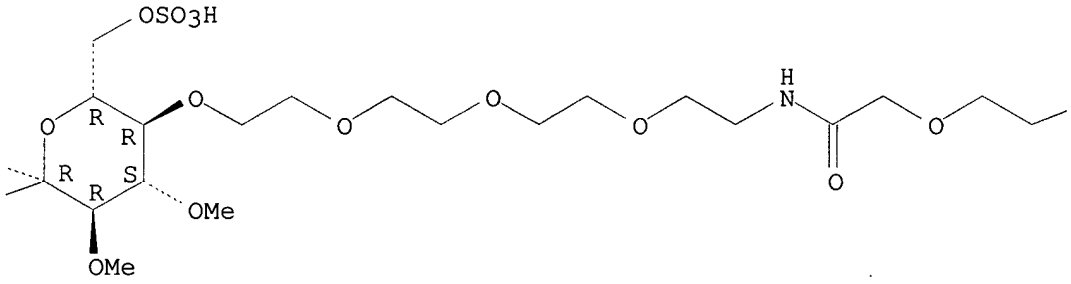
Absolute stereochemistry.

PAGE 1-A

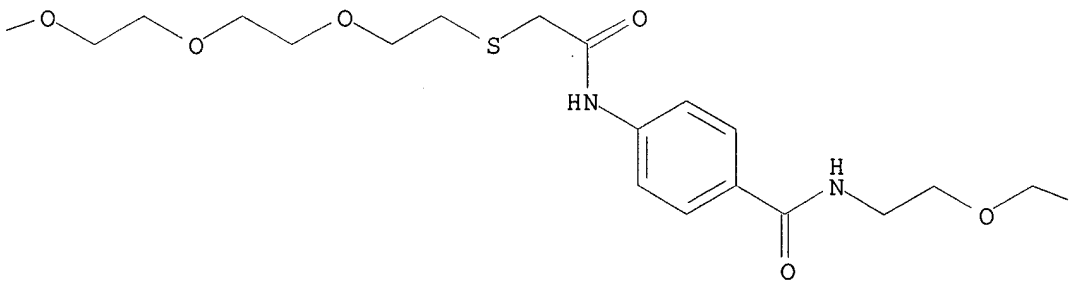


●16 Na

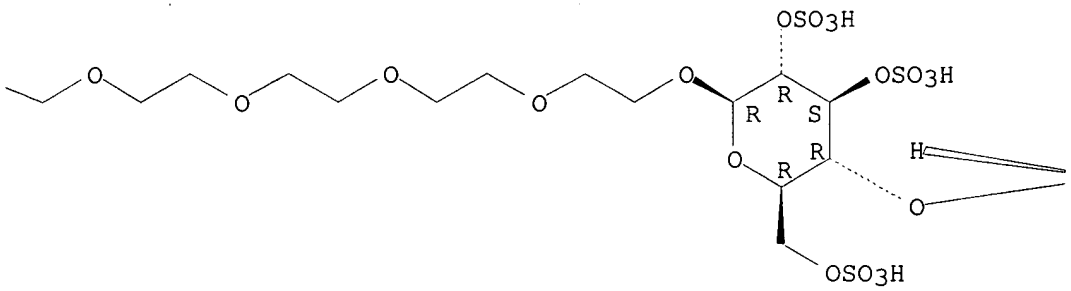
PAGE 1-B



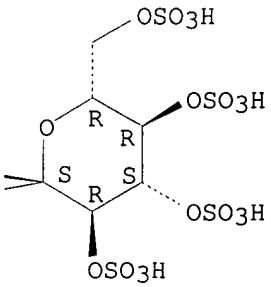
PAGE 1-C



PAGE 1-D



PAGE 1-E



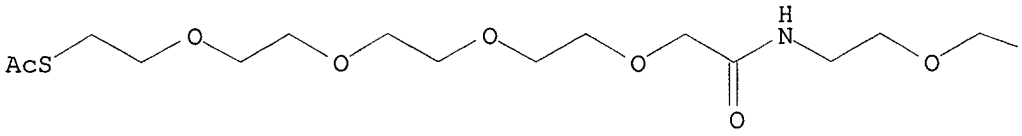
IT **169751-22-8P 169751-25-1P 169751-77-3P**
169751-78-4P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. of bisconjugates comprising two **oligosaccharide** sulfate and a **spacer** as antithrombotics)

RN 169751-22-8 HCAPLUS

CN .alpha.-D-Glucopyranoside, methyl O-4-O-(13,28-dioxo-3,6,9,15,18,21,24-heptaoxa-27-thia-12-azanonacos-1-yl)-2,3-di-O-methyl-6-O-sulfo-.alpha.-D-glucopyranosyl-(1.fwdarw.4)-O-2,3-di-O-methyl-.beta.-D-glucopyranuronosyl-(1.fwdarw.4)-O-2,3,6-tri-O-sulfo-.alpha.-D-glucopyranosyl-(1.fwdarw.4)-O-2,3-di-O-methyl-.alpha.-L-idopyranuronosyl-(1.fwdarw.4)-, 2,3,6-tris(hydrogen sulfate), nonasodium salt (9CI) (CA INDEX NAME)

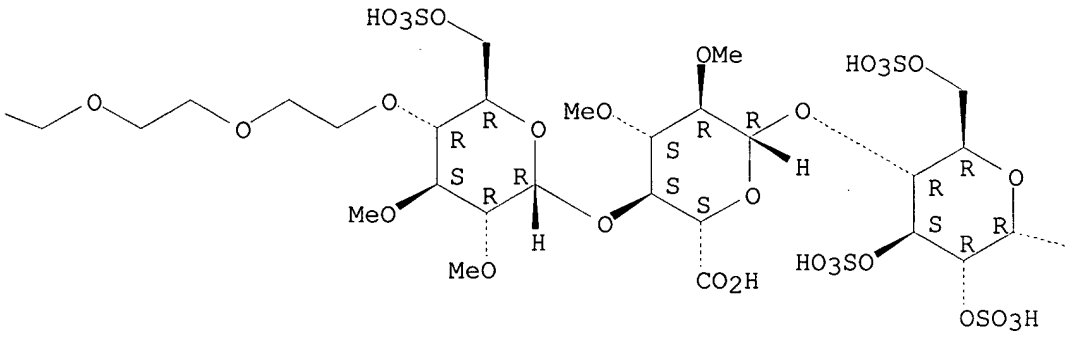
Absolute stereochemistry.

PAGE 1-A

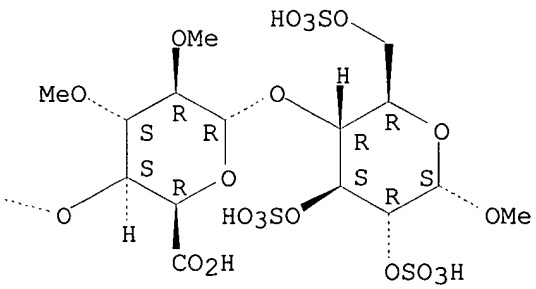


●9 Na

PAGE 1-B



PAGE 1-C

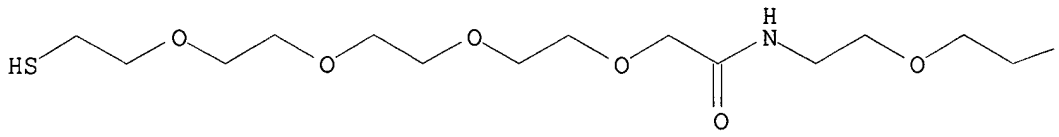


RN 169751-25-1 HCAPLUS
CN .alpha.-D-Glucopyranoside, methyl O-4-O-(26-mercapto-13-oxo-3,6,9,15,18,21,24-heptaoxa-12-azahexacos-1-yl)-2,3-di-O-methyl-6-O-sulfo-.alpha.-D-glucopyranosyl-(1.fwdarw.4)-O-2,3-di-O-methyl-.beta.-D-glucopyranuronosyl-(1.fwdarw.4)-O-2,3,6-tri-O-sulfo-.alpha.-D-

glucopyranosyl-(1.fwdarw.4)-O-2,3-di-O-methyl-.alpha.-L-idopyranuronosyl-(1.fwdarw.4)-, 2,3,6-tris(hydrogen sulfate), nonasodium salt (9CI) (CA INDEX NAME)

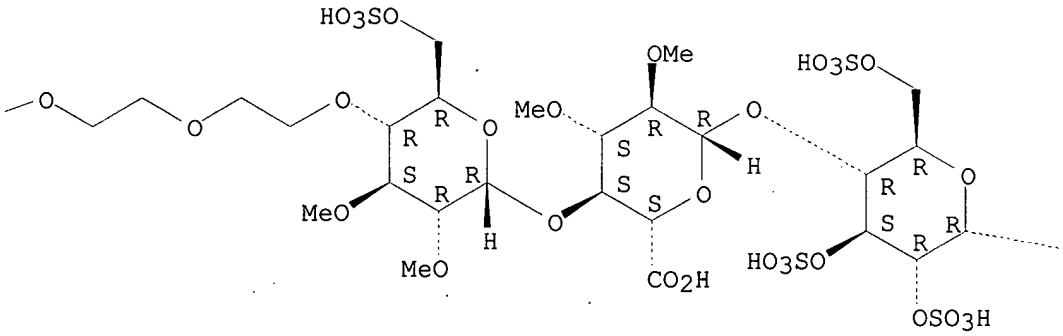
Absolute stereochemistry.

PAGE 1-A

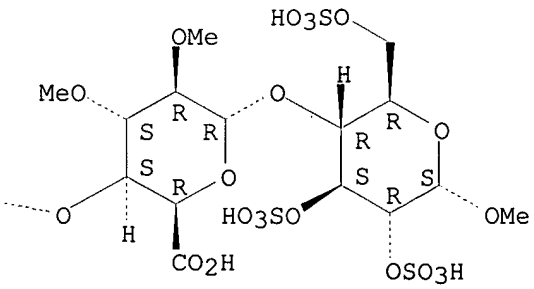


●9 Na

PAGE 1-B



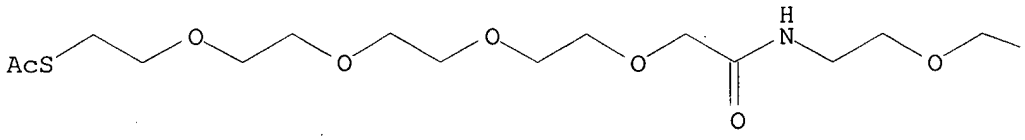
PAGE 1-C



RN 169751-77-3 HCAPLUS
CN .alpha.-D-Glucopyranoside, methyl O-4-O-(13,28-dioxo-3,6,9,15,18,21,24-heptaoxa-27-thia-12-azanonacos-1-yl)-.alpha.-D-glucopyranosyl-(1.fwdarw.4)-O-2,3-di-O-methyl-.beta.-D-glucopyranuronosyl-(1.fwdarw.4)-O-.alpha.-D-glucopyranosyl-(1.fwdarw.4)-O-2,3-di-O-methyl-.alpha.-L-idopyranuronosyl-(1.fwdarw.4)-, disodium salt (9CI) (CA INDEX NAME)

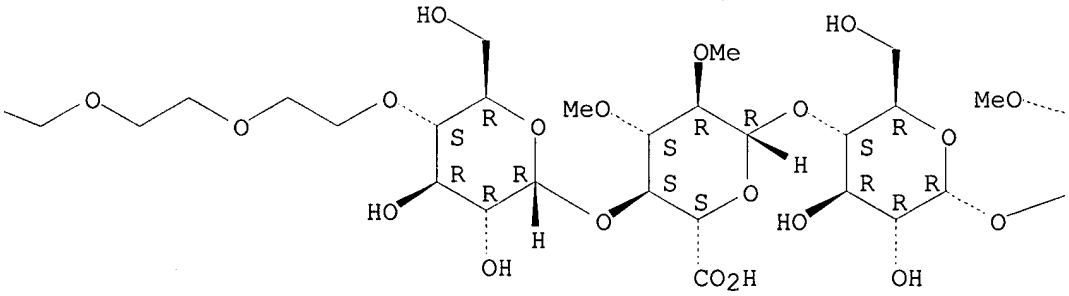
Absolute stereochemistry.

PAGE 1-A

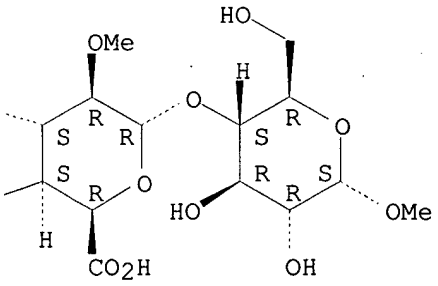


●2 Na

PAGE 1-B



PAGE 1-C

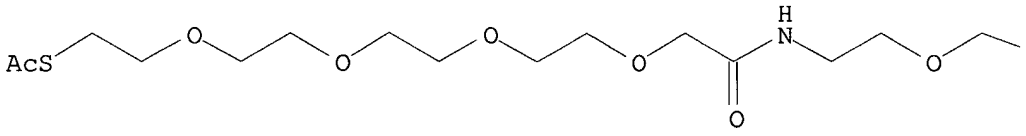


RN 169751-78-4 HCAPLUS

CN .alpha.-D-Glucopyranoside, methyl O-4-O-(13,28-dioxo-3,6,9,15,18,21,24-heptaoxa-27-thia-12-azanonacos-1-yl)-2,3,6-tri-O-sulfo-.alpha.-D-glucopyranosyl-(1.fwdarw.4)-O-2,3-di-O-methyl-.beta.-D-glucopyranuronosyl-(1.fwdarw.4)-O-2,3,6-tri-O-sulfo-.alpha.-D-glucopyranosyl-(1.fwdarw.4)-O-2,3-di-O-methyl-.alpha.-L-idopyranuronosyl-(1.fwdarw.4)-, 2,3,6-tris(hydrogen sulfate), undecasodium salt (9CI) (CA INDEX NAME)

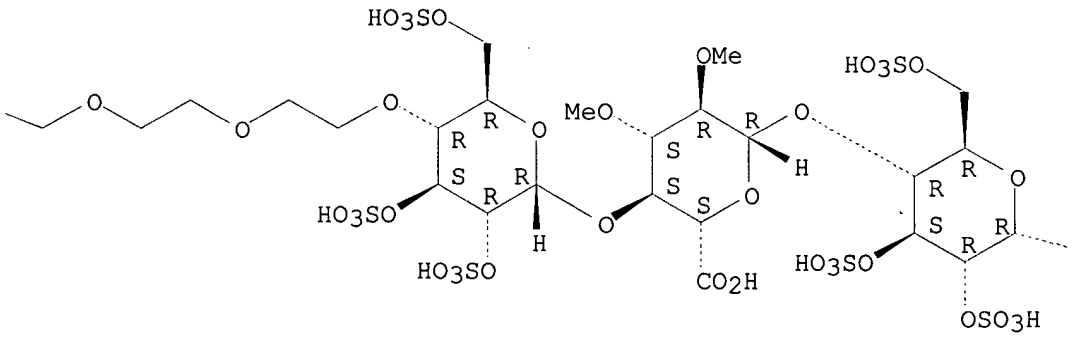
Absolute stereochemistry.

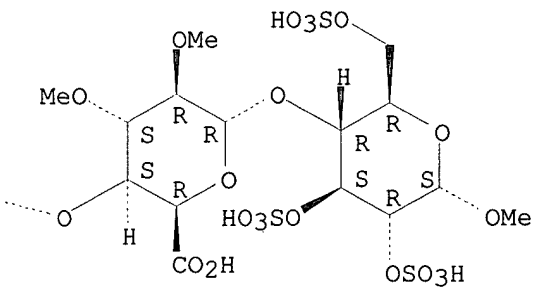
PAGE 1-A



●11 Na

PAGE 1-B





L6 ANSWER 29 OF 33 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1995:715772 HCAPLUS
DOCUMENT NUMBER: 123:340884
TITLE: Versatile synthesis of bi- and tri-antennary **galactose** ligands: interaction with the Gal/GalNAc receptor of human hepatoma cells
AUTHOR(S): Kichler, Antoine; Schuber, Francis
CORPORATE SOURCE: Lab. Chim. Bioorg., Fac. Pharm., Illkirch, 67400, Fr.
SOURCE: Glycoconjugate J. (1995), 12(3), 275-81
CODEN: GLJOEW; ISSN: 0282-0080
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 123:340884

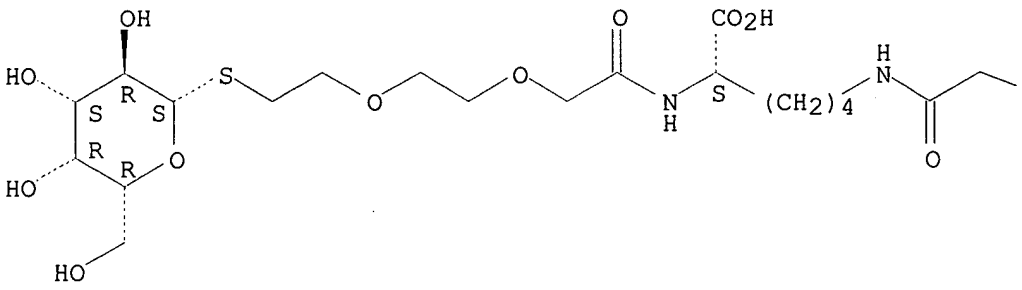
AB Bi- and tri-antennary **galactose** ligands were prepd. by coupling 1-thio-.beta.-D-**galactose** derivs. to the .alpha.- and .epsilon.-amino groups of Lys and H-Lys-Lys-OH via highly flexible hydrophilic **spacer** arms that allow variation of their **intergalactose** distances. The interaction of these ligands with the Gal/GalNAc receptor of HepG2 cells showed a binding affinity that was (i) in agreement with the clustering effect known to occur with more complex oligomeric structures, i.e. tri- > bi-antennary and (ii) dependent on the **intergalactose** distances (optimal interactions were obsd. for the tri-antennary structures with distances > 2 nm). These ligands, that can be easily **conjugated** to bioactive (macro) mol. carrier systems, could be useful for their targeting to hepatocytes.

IT **170304-71-9P 170304-72-0P 170304-74-2P**
RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(versatile synthesis of bi- and triantennary **galactose** ligands and their interaction with human hepatoma cell **galactose** receptors)

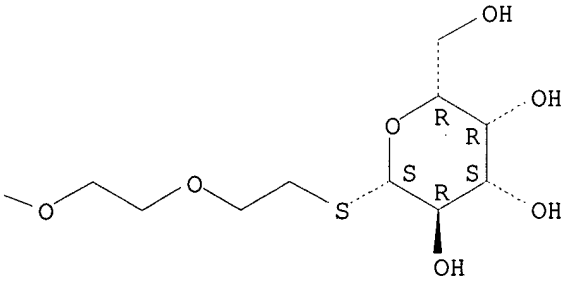
RN 170304-71-9 HCAPLUS
CN L-Lysine, N2,N6-bis[[2-[2-(.beta.-D-galactopyranosylthio)ethoxy]ethoxy]acetyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



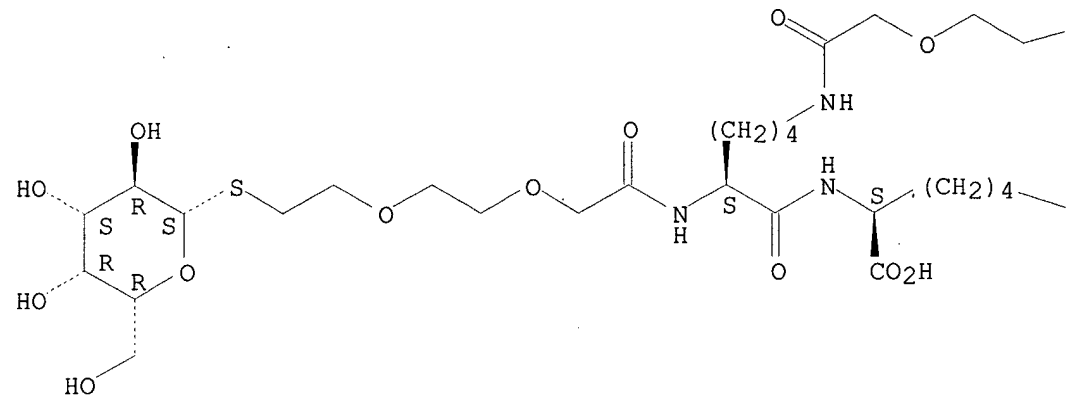
PAGE 1-B



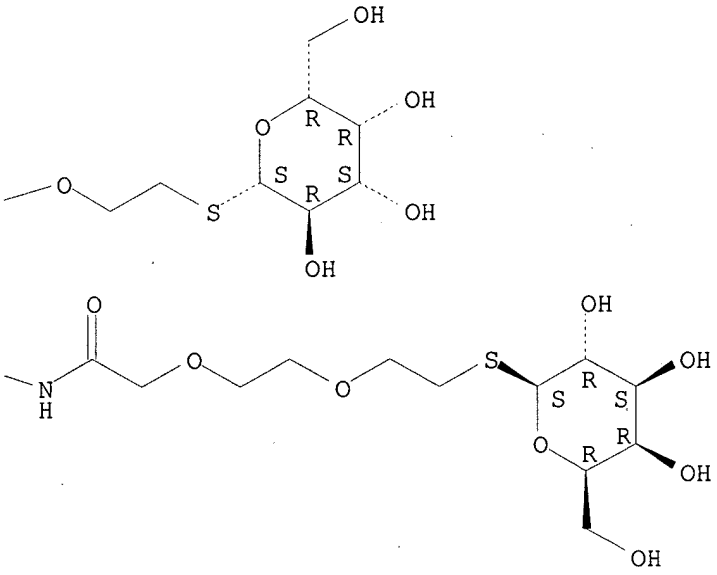
RN 170304-72-0 HCAPLUS
CN L-Lysine, N2,N6-bis[[2-[2-(.beta.-D-galactopyranosylthio)ethoxy]ethoxy]acetyl]-L-lysyl-N6-[[2-[2-(.beta.-D-galactopyranosylthio)ethoxy]ethoxy]acetyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



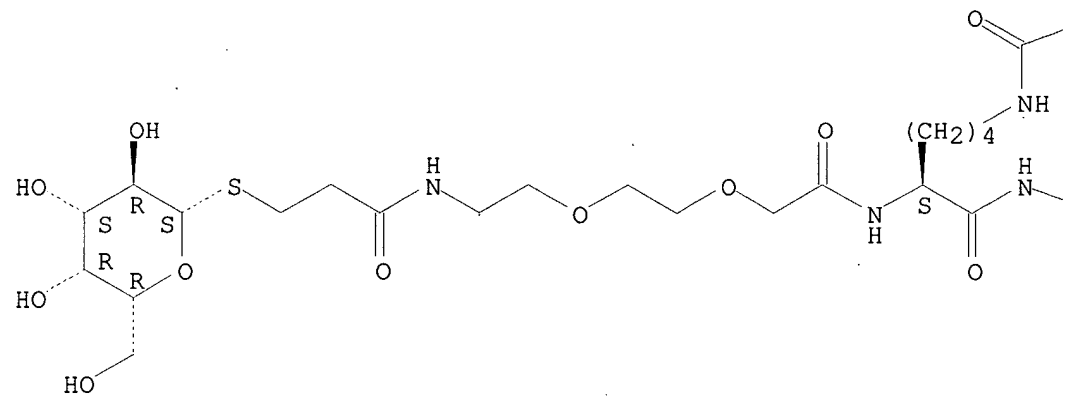
PAGE 1-B



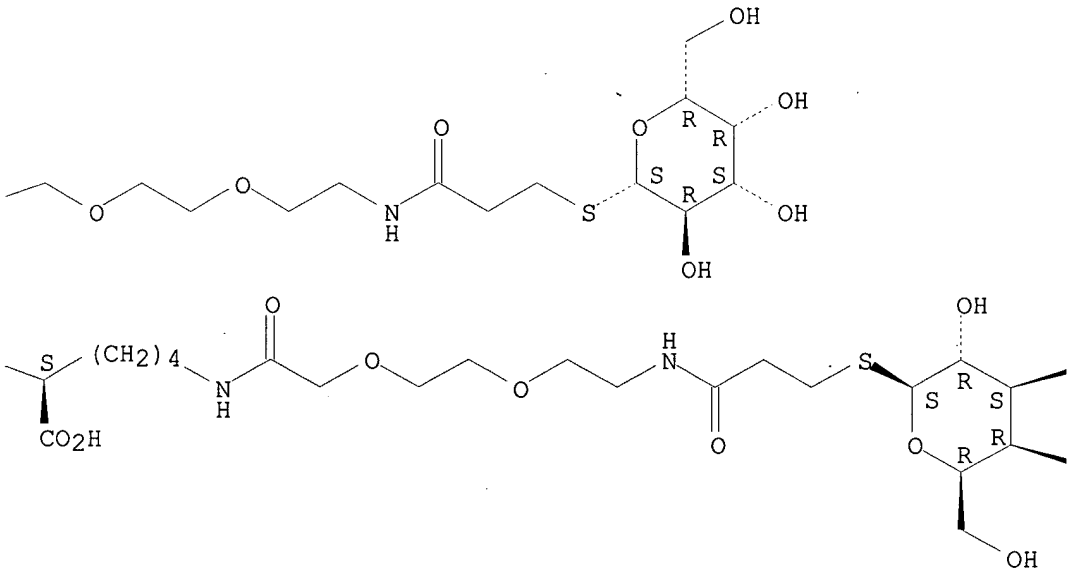
RN 170304-74-2 HCAPLUS
CN L-Lysine, N2-[N2,N6-bis[[2-[2-[[3-(.beta.-D-galactopyranosylthio)-1-oxopropyl]amino]ethoxy]ethoxy]acetyl]-L-lysyl]-N6-[[2-[2-[[3-(.beta.-D-galactopyranosylthio)-1-oxopropyl]amino]ethoxy]ethoxy]acetyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

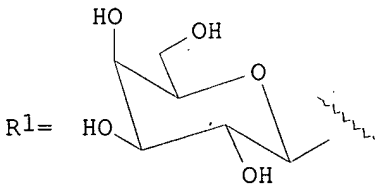
PAGE 1-A

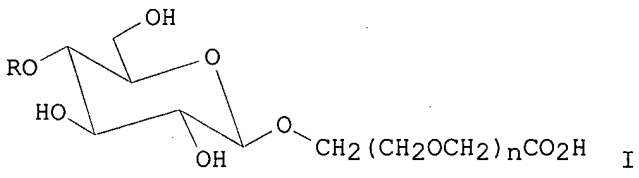


PAGE 1-B



L6 ANSWER 30 OF 33 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1994:299153 HCAPLUS
DOCUMENT NUMBER: 120:299153
TITLE: Synthesis of oligosaccharides with oligoethylene glycol spacers and their conversion into glycoconjugates using N,N,N',N"-tetramethyl(succinimido)uronium tetrafluoroborate as coupling reagent
AUTHOR(S): Andersson, Mats; Oscarson, Stefan; Oeberg, Liselotte
CORPORATE SOURCE: Dep. Org. Chem., Stockholm Univ., Stockholm, S-106 91, Swed.
SOURCE: Glycoconjugate J. (1993), 10(3), 197-201
CODEN: GLJOEW; ISSN: 0282-0080
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 120:299153
GI





I

AB Glycosides I (R = H, R1 , n = 2, 4), transformed into bifunctional (alc.,

ester) **spacer** mols., have been synthesized. After deprotection, these **spacer** glycosides, contg. a free carboxyl group, have been transformed efficiently into glycoconjugates using the coupling reagent N,N,N',N"-tetramethyl(succinimido)uronium tetrafluoroborate (TSTU) for the formation of an active ester.

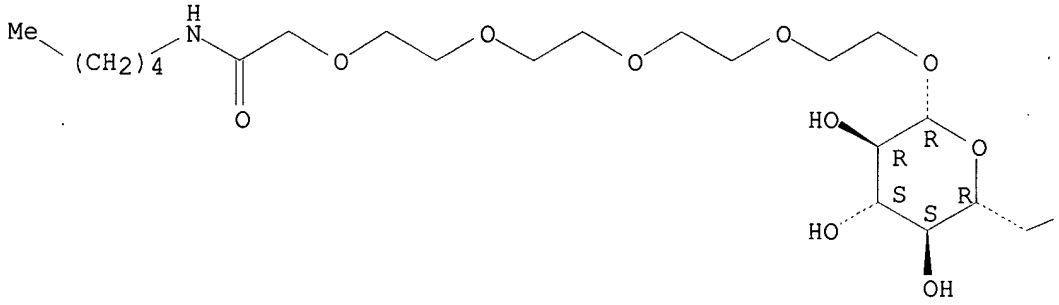
IT **154773-42-9P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)

RN 154773-42-9 HCAPLUS

CN 3,6,9,12-Tetraoxatetradecanamide, 14-(.beta.-D-glucopyranosyloxy)-N-pentyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

OH

L6 ANSWER 31 OF 33 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1993:116295 HCAPLUS

DOCUMENT NUMBER: 118:116295

TITLE: Synthesis and antitumor activity of poly(ethylene glycol)s linked to 5-fluorouracil via a urethane or urea bond

AUTHOR(S): Ouchi, Tatsuro; Hagihara, Yuji; Takahashi, Kenji; Takano, Yoshihisa; Igarashi, Ichiro

CORPORATE SOURCE: Fac. Eng., Kansai Univ., Suita, 564, Japan

SOURCE: Drug Des. Discovery (1992), 9(1), 93-105
CODEN: DDDIEV; ISSN: 1055-9612

DOCUMENT TYPE: Journal

LANGUAGE: English

AB In order to provide a macromol. prodrug of 5-fluorouracil (5FU) with reduced side-effects and exhibiting strong antitumor activity, 5FU was covalently linked to poly(ethylene glycol) (PEG) via a urethane or urea bond. For the purpose of evaluating the release behavior of 5FU, the hydrolysis of the urethane or urea bond in the obtained **conjugate** of PEG-end capped with 5FU was investigated in vitro at 37.degree.C in aq.

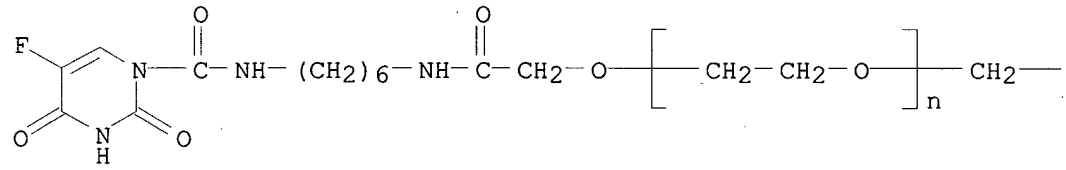
soln. media. The survival effect for the **conjugate** was assessed in vivo against p388 lymphocytic leukemia in female CDF1 mice by i.p. transplantation/i.p. injection. The effects of a hydrophobic hexamethylene **spacer** group, the end group and the no. n of ethylene oxide (EO) units in PEG on the release behavior of 5FU and the survival effect were investigated. The release rate of 5FU from the 5FU-terminated PEG **conjugates** via urethane or urea bond was very fast. However, it became slow with increasing n of EO units in PEG and was depressed by the introduction of hydrophobic **spacer** group. The 5FU-terminated PEG **conjugates** obtained exhibited significant survival effects against p388 leukemia mice i.p./i.p. Esp., the methoxy PEG (n = 113)/urethane/hexamethylene/urea/5FU **conjugate** showed the strongest survival effect among the synthesized 5FU-capped PEG **conjugates** via urethane or urea bond compared to free 5FU against p388 leukemia mice. These **conjugates** obtained did not display an acute toxicity even in high dose ranges.

IT **146245-65-0P**
RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. and antitumor activity of)

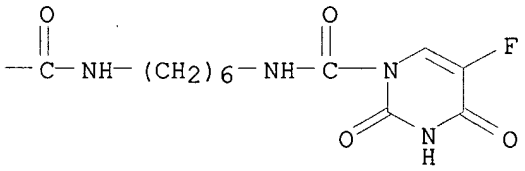
RN 146245-65-0 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), .alpha.-[2-[[6-[[(5-fluoro-3,4-dihydro-2,4-dioxo-1(2H)-pyrimidinyl)carbonyl]amino]hexyl]amino]-2-oxoethyl]-.omega.-[2-[[6-[[(5-fluoro-3,4-dihydro-2,4-dioxo-1(2H)-pyrimidinyl)carbonyl]amino]hexyl]amino]-2-oxoethoxy]- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



L6 ANSWER 32 OF 33 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1980:581439 HCAPLUS
DOCUMENT NUMBER: 93:181439
TITLE: Lectin-mediated aggregation of liposomes containing glycolipids with variable hydrophilic **spacer** arms
AUTHOR(S): Slama, James S.; Rando, Robert R.
CORPORATE SOURCE: Dep. Pharmacol., Harvard Med. Sch., Boston, MA, 02115, USA
SOURCE: Biochemistry (1980), 19(20), 4595-600

CODEN: BICHAW; ISSN: 0006-2960
DOCUMENT TYPE: Journal
LANGUAGE: English

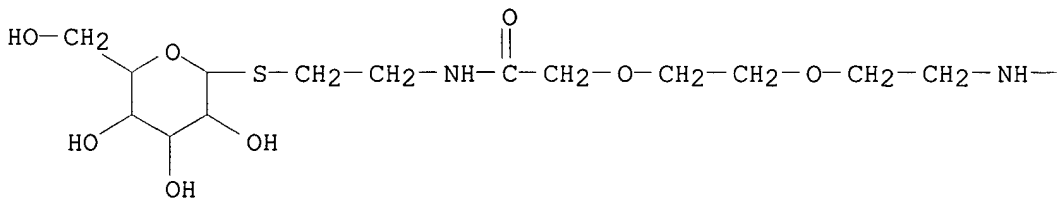
AB Synthetic glycolipids contg. a cholesterol anchor group attached via a **spacer** group to a sugar moiety can be incorporated into small unilamellar liposomes, rendering them susceptible to agglutination by the appropriate multivalent lectin. The role of **spacer** arm length in rendering these liposomes susceptible to agglutination was studied. In order to eliminate the ambiguities inherent in using hydrophobic or charged **spacer** groups, a hydrophilic, ethylene glycol based amino acid (8-amino-3,6-dioxaoctanoic acid) was synthesized for these studies. The Ricinus communis agglutinin (ricin)-mediated agglutination of these .beta.-**galactoside**-contg. glycolipids was studied. A **spacer** arom length of 4 atoms will not support agglutination under any conditions. A 7-atom **spacer** will support agglutination, but only at high phospholipid concns. (0.24 .mu.mol/mL) with a pseudo-1st-order rate of agglutination of 0.0079 min-1. With 13 and 22 atom **spacer** groups, the pseudo-1st-order rate consts. were 0.4 min-1 and 1.3 min-1, resp., at a phospholipid concn. of 0.06 .mu.mol/mL). Under the conditions where the liposomes contg. the glycolipid with the 13-atom hydrophilic **spacer** arm were completely agglutinated by ricin, 9.3% of the total available sugar moieties of the liposome were bound to ricin. This means that, on the av., 38 interliposomal bonds were formed in an aggregate.

IT **75001-12-6 75001-13-7**
RL: BIOL (Biological study)
(liposomes contg., ricin-mediated aggregation of, **spacer** group effect on)

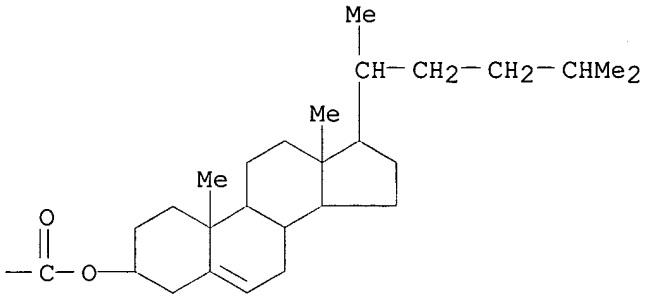
RN 75001-12-6 HCAPLUS

CN Cholest-5-en-3-ol (3.beta.)-, 13-(.beta.-D-galactopyranosylthio)-10-oxo-5,8-dioxa-2,11-diazatridecanoate (9CI) (CA INDEX NAME)

PAGE 1-A

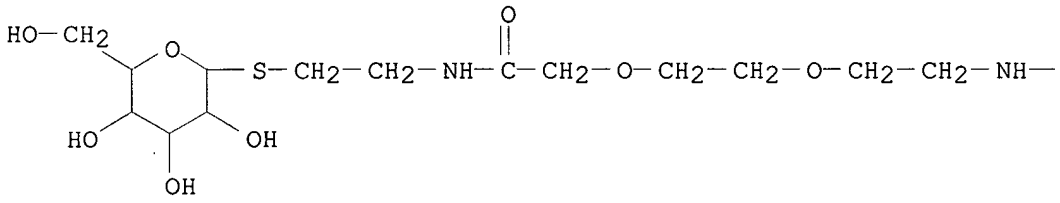


PAGE 1-B

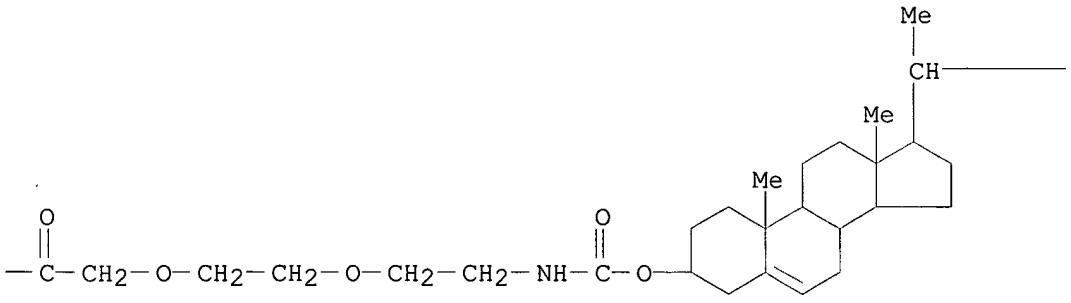


RN 75001-13-7 HCAPLUS
CN Cholest-5-en-3-ol (3.beta.)-, 22-(.beta.-D-galactopyranosylthio)-10,19-dioxo-5,8,14,17-tetraoxa-2,11,20-triazadocosanoate (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



— $(CH_2)_3$ — $CHMe_2$

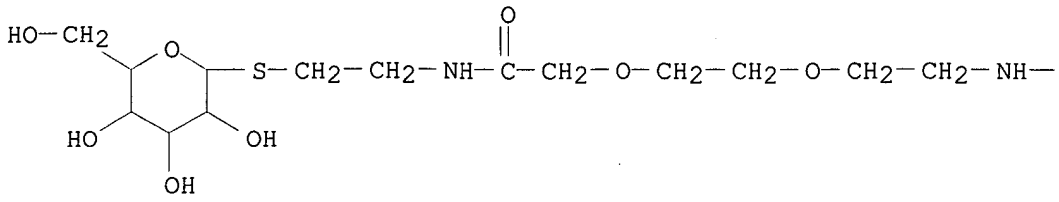
L6 ANSWER 33 OF 33 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1980:465345 HCAPLUS
DOCUMENT NUMBER: 93:65345
TITLE: Functional incorporation of synthetic glycolipids into cells
AUTHOR(S): Rando, R. R.; Slama, J.; Bangerter, F. W.
CORPORATE SOURCE: Dep. Pharmacol., Harvard Med. Sch., Boston, MA, 02115, USA
SOURCE: Proc. Natl. Acad. Sci. U. S. A. (1980), 77(5), 2510-13
CODEN: PNASA6; ISSN: 0027-8424
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Synthetic glycolipids contg. an .alpha.-mannoside group linked by a hydrophilic **spacer** arm to cholesterol were incorporated into bovine erythrocytes by exchange from glycolipid-contg. liposomes. When the distance between the sugar and the cholesterol moieties was .apprx.26 .ANG., functional incorporation of these glycolipids could be easily detected, as revealed by the concanavalin A-mediated agglutination of these cells. Bovine erythrocytes are not themselves susceptible to concanavalin A-mediated agglutination. The minimal concn. of concanavalin A required for agglutination of modified erythrocytes, contg. 9.15 .times. 106 glycolipid mols./cell, was 4 .mu.g/mL. Under these conditions, only .apprx.4% of the membrane-bound cholesterol had been exchanged for the synthetic glycolipid. The obsd. aggregation was reversible in the presence of .alpha.-Me mannoside and did not occur when .beta.-**galactosyl**-contg. glycolipids were used in place of their .alpha.-mannoside isomers. This technique of sugar incorporation into cell membranes should be of great advantage in studies on the roles of cell surface sugars in biol. recognition. Furthermore, the sugars need only be a short distance (26 .ANG.) from the membrane in order to functionally bind concanavalin A.

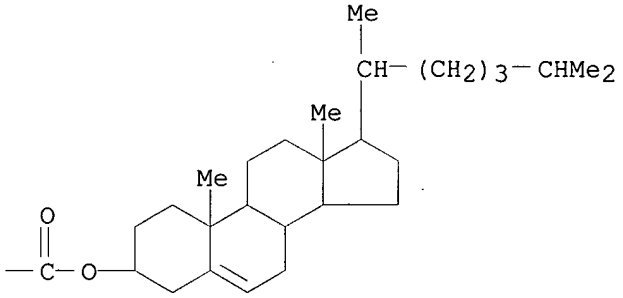
IT **74341-54-1 74351-47-6 74351-48-7**
RL: PROC (Process)
(erythrocyte membrane incorporation of, by exchange with liposome)

RN 74341-54-1 HCAPLUS
CN Cholest-5-en-3-ol (3.beta.)-, 13-(.alpha.-D-mannopyranosylthio)-10-oxo-5,8-dioxa-2,11-diazatetradecanoate (9CI) (CA INDEX NAME)

PAGE 1-A

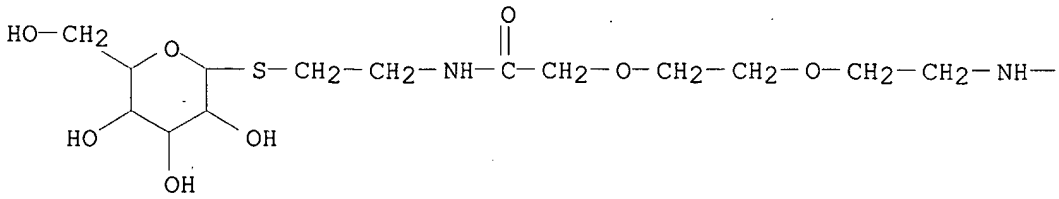


PAGE 1-B

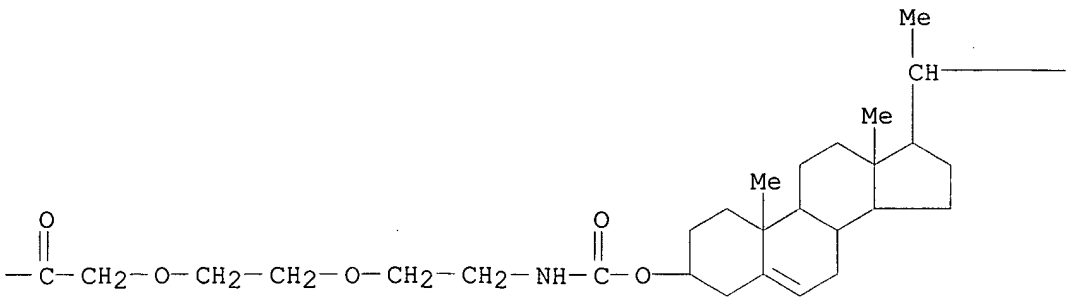


RN 74351-47-6 HCAPLUS
CN Cholest-5-en-3-ol (3.beta.)-, 22-(.alpha.-D-mannopyranosylthio)-10,19-dioxo-5,8,14,17-tetraoxa-2,11,20-triazadocosanoate (9CI) (CA INDEX NAME)

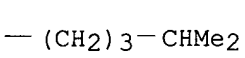
PAGE 1-A



PAGE 1-B

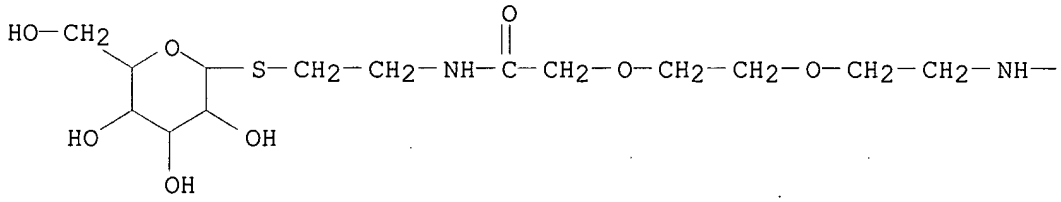


PAGE 1-C

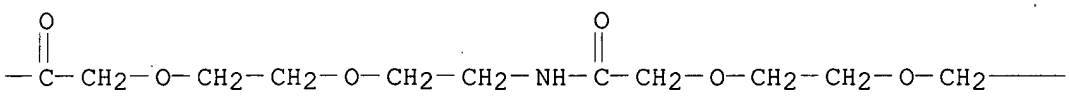


RN 74351-48-7 HCAPLUS
CN Cholest-5-en-3-ol (3.beta.)-, 40-(.alpha.-D-mannopyranosylthio)-10,19,28,37-tetraoxo-5,8,14,17,23,26,32,35-octaoxa-2,11,20,29,38-pentaazatetracontanoate (9CI) (CA INDEX NAME)

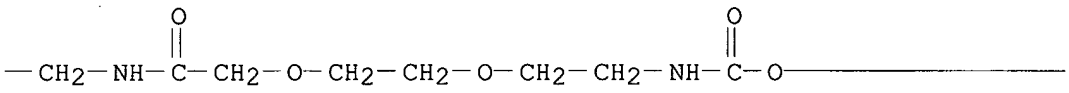
PAGE 1-A



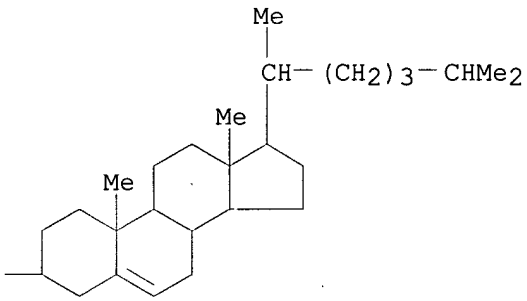
PAGE 1-B



PAGE 1-C



PAGE 1-D



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=> d his

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               DEL HIS

     FILE 'REGISTRY' ENTERED AT 16:35:05 ON 03 JUN 2002
               ACT RUS980PAR/A
              ---------
L1             STR
L2          1103 SEA FILE=REGISTRY SSS FUL L1
              ---------

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               SAVE L*** RUS980A1/A
               SAVE L*** RUS980A1/A
L3        390510 S ?DEXTRAN OR ?SACCHARIDE OR ?GALACTOS? OR CONJUGAT?
L4         37183 S LINKER OR SPACER
L5          3593 S L3 AND L4
L6            33 S L2 AND L5
```

~1103 compds for str.

- 33 cits for str. compds combined with text terms. See attached d que.

Jeffrey, This is the search I did, based on your structure. There was a large yield, but nothing was really relevant.

Pls. see Susan Hanley's search for more interesting results!

```
=> d que l6
L1                STR

 15               16
  O               O
  ~               ||
  ~
5 CH~CH2-O~~CH2-C~~NH~C
     6   7   8   9   10  11

NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS   9

STEREO ATTRIBUTES: NONE
L2          1103 SEA FILE=REGISTRY SSS FUL L1
L3        390510 SEA FILE=HCAPLUS ?DEXTRAN OR ?SACCHARIDE OR ?GALACTOS? OR
                 CONJUGAT?
L4         37183 SEA FILE=HCAPLUS LINKER OR SPACER
L5          3593 SEA FILE=HCAPLUS L3 AND L4
L6            33 SEA FILE=HCAPLUS L2 AND L5
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